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THE NATIONAL

ECLECTIC MEDICAL ASSOCIATION

QUARTERLY

EDITED BY
WILLIAM NELSON MUNDY, M.D.

A JOURNAL OF ECLECTIC MEDICINE AND SURGERY

Comprising the Proceedings, Papers and Discussions of the Association, and Published in the Interest of the Eclectic School of Medicine.

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AUTHORS

Adlerman, Theo. D., 72, 109, 208.
Andrus, F. M., 232.
Aylesworth, Geo. W., 151.
Baird, O. C., 121.
Barbrick, J. Fraser, 148.
Beal, J. H., 30.
Best, Wm. P., 128, 216, 284.
Buckingham, J. R., 325.
Bullington, P. F., 146.
Calloway, W. G., 305.
Canfield, M. S., 293.
Coffin, Orlands S., 1.
Coleman, Joseph, 320.
Cox, Herbert T., 212.
Daniels, W. E., 223, 307.
East, C. W., 47.
Ellingwood, Finley, 23.
Fyfe, John W., 137.
Givens, Amos J., 106.
Graves, N. A., 203.
Hauck, J. H., 300.
Helbing, H. H., 132.
Holman, J. E., 236.
Horovitz, A. S., 65.
Hubbard, B. Roswell, 228.
Huntley, J. H., 115.
Jurdan, W. E., 193.
Lloyd, J. U., 44.
Mack, Frank A., 286.
Merrell, Charles G., 55, 155.
Mundy, Carll S., 99, 316.
Mundy, W. N., 140, 288.
McCann, J. D., 138.
Nellans, Byron H., 233.
Porter, G. C., 295.
Powell, John H., 213.
Rogers, Ivadell, 134.
Sackett, C. S., 153.
Saxton, D. E., 226.
Schussler, W. R., 275.
Sharp, E. G., 304.
Sheridan, George V., 331.
Smith, H. C., 77.
Stir-Smith, Florence, 303.
Tommasello, Stanley, 231.
Waddington, J. E. G., 210.
Welbourn, O. C., 146.
Wilkenloh, Margareta, 219.
Wilson, N. G., 297.
Woodward, Chas., 221, 291, 302.
Zeumer, E. P., 237.

INDEX

Accuracy of the Wassermann Test, 347.
Address, President's, 23.
Age, Important Problem of the, 106.
American Hellebore, Veratrum Viride or, 307.
An Appreciation, 338.
An Important Problem of the Age, 106.
An Open Letter, 337.
Anti-Typhus Campaign Wins Russian Gratitude, 241.
Asclepias, 236.
Augustifolia, Echinacea, 305.
Blood Chemistry to Internal Medicine, the Relation of, 316.
Bonds Not Necessary for Physicians, 351.
Breech Extraction with True Knot in Umbilical Cord, Report of a Still-born Child, 286.
Bronchopneumonia, 137.
Bryonia Alba, 304.
Campaign Wins Russian Gratitude, Anti-Typhus, 241.
Care, Post-Surgical, 216.
Cardio-Vascular Disease from a Military Standpoint, The Diagnosis and Treatment of, 99.
Case Atony, Clinical Observation of, 146.
Cell Atony, Clinical Observation of, 221.
Child Life, Betterment of, 134.
Chorea, 288.
Chronic Joint Diseases, Pathology and Treatment of, 115.
Chronic Nephritis, the Treatment of, 210.
City and Country Obstetrics, 223.
Clinical Observation of Cell Atony, 221.
Coffin, Orlands S., 1.
Colic That Is Not, 77.
Colotomy, Operative Technique and Morbid Conditions Requiring the Operation, 228.
Complications and Cure—Fractures of Wrist and Ankle, 125.
Complications of Influenza, Surgical, 232.
Complications, Post-Operative, 275.
Cough and Its Significance, 148.
Cough, Its Cause, Significance in Diagnosis, Prognosis and Treatment, 203.
Day in the Life of a Health Insurance Panel Doctor, a, 351.
Diagnosis and Treatment of Cardio-Vascular Disease from a Military Standpoint, the, 99.
Diseases of the Upper Respiratory Tract, 320.
Diet in Influenza, 233.
Direct Message to You on Pressing Professional Problems, a, 331.
Diseases of the Eye and Nose, Related, 213.
Diseases, the Care and Treatment of Mental and Nervous, 106.
Diseases, Pathology and Treatment of Chronic Joint, 115.
Dose, the Small, 332.
Drug Plants in the United States, the Cultivation of, 155.
Dry Law Gives Young Doctors Ample Incomes, 339.
Echinacea Augustifolia, 305.
Eclecticism—Specific Medication, 128.
Eclecticism—What It Stands for, 193.
Ectopic Gestation, 132.
Empyema Following the Influenza, a Case, 146.
Erysipelas—Its Irregularities and Treatment, 121.
Extensive Military Service, 339.
Eye and Nose, Related Disease of the, 213.
Fractures of Wrist and Ankle—Complications and Cure, 125.
Germs and Their Ways, 237.
Gestation, Ectopic, 132.
Goiter, 219.
Hellebore, Veratrum Viride or American, 307.
Hookworm, 226.
Hymen and Perineum, the Vagina, 300.
Important Problem of the Age, An, 106.
Infantile Paralysis, Result of Continuous Investigation, 47.
Influenza, 333.
Influence of the War on the Cultivation of Medicinal Plants, 55.
Influenza, a Case of Empyema Following the, 146.
Influenza, Surgical Complications of, 232.
Influenza, Diet in, 233.
Internal Medicine, the Relation of Blood Chemistry to, 316.
Intrauterine Medication, a Talk on, 291.
Lobar Pneumonia, 293.
Medication, a Talk on Uterine, 291.
Medical Examination and Registration, Schedule of Examination and Questions of the Indiana State Board of, 309.
Medicinal Plants, Influence of the War on the Cultivation of, 55.
Mental and Nervous Diseases, the Care and Treatment of, 106.

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Metaphysic, Passionmania in Relation to, 231.
Military Standpoint, the Diagnosis and Treatment of Cardio-Vascular Disease from a, 99.
Mothers' Pensions, 349.
Nation's Physique, the, 348.
Needs of the Children of Porto Rico and the Virgin Islands, the, 349.
Nephritis, Chronic, the Treatment of, 210.
Nerve Treatment, Relieving Rectal Irritation and, 295.
Neuroses, Sexual, 72.
Nose and Eye, Related Diseases of the, 213.
Observation of Cell Atony, Clinical, 221.
Obstetrics, City and Country, 233.
Operative Technique and Morbid Conditions Requiring the Operation, 228.
Organization, 334.
Orlands S. Coffin, 1
Paralysis, Infantile, 47.
Passionmania in Relation to Metaphysic, 231.
Pathology and Treatment of Chronic Joint Diseases, 115.
Pensions, Mothers', 399.
Perineum, the Vagina, Hymen and, 300.
Pharmacist, Some Aspects of Eclecticism as They Appear to a, 30.
Plea for Psychotherapy, 109.
Pleuropneumonia, 153.
Pneumonia, Broncho, 137.
Pneumonia, 138.
Pneumonia, 140.
Pneumonia, Lobar, 293.
Pneumonia, Treatment of, 151.
Post-Operative Complications, 275.
Post-Surgical Care, 216.
Prohibition Pay from a Health Standpoint, Does, 331.
President's Address, 23.
Professional Problems, Direct Message to You on Present, 331.
Proceedings of the Forty-ninth Annual Session of the National Eclectic Medical Association, 2.
Prognosis and Treatment, Cough, Its Cause—Significance in Diagnosis, 203.
Prolapsus Recti, 212.
Protein Therapy, the Non-Specific Plant, 65.
Psychotherapy, a Plea for, 109.
Rectal Irritation and Nerve Treatment, Relieving, 295.
Recti, Prolapsus, 212.
Related Diseases of the Eye and Nose, 213.
Relation of Blood Chemistry to Internal Medicine, 316.
Relation to Metaphysic, Passionmania in, 231.
Relieving Rectal Irritation and Nerve Treatment, 295.
Report of a Stillborn Child, 286.
Rispiratory Tract, Diseases of the Upper, 320.
Response, 44.
Sexual Neuroses, 72.
Schedule of Examination and Questions of the Indiana State Board of Medical Examinations and Registration, 309.
Significance in Diagnosis, Prognosis and Treatment, Cough— Its Cause, 203.
Significance, Cough and Its, 148.
Some Aspects of Eclecticism as They Appear to a Pharmacist, 30
Specific Medication, Eclecticism, 128.
Spine, the, 284.
Surgical Complications of Influenza, 232.
Surgical Care, Post, 216.
Talk on Intrauterine Medication, 291.
That Is Not Colic, 77.
The Relation of Blood Chemistry to Internal Medicine, 316.
The Care and Treatment of Mental and Nervous Diseases, 106.
The Cultivation of Drug Plants in the United States, 155.
The Diagnosis and Treatment of Cardio-Vascular Disease from a Military Standpoint, 99.
Non-Specific Plant Protein Therapy, 65.
Treatment of Chronic Nephritis, 210.
Three Bad Bills, 350.
Treatment, Pneumonia, 151.
Tumors of the Womb and Adnexa, Treatment of the, 146.
Umbilical Cord, Report of a Stillborn Child; Breach Extraction with True Knot in, 286.
United States, the Cultivation of Drug Plants in the, 155.
Unusual Injury, An, 327.
Vagina, Hymen and Perineum, the, 300.
Veratrum Viride or American Hellebore, 307.
Vertigo, 208.
Wassermann Test, Accuracy of the, 347.
Womb and Adnexa, the Treatment of the Tumors of the, 146.
World-Wide Service for Merchant Marine, 352.
Wrist and Ankle, Fractures of, Complications and Cure, 125.

ORLANDS S. COFFIN, M.D.

President-elect of the National Eclectic Medical Association.

THE NATIONAL
ECLECTIC MEDICAL ASSOCIATION
QUARTERLY

Vol. XI. CINCINNATI, SEPTEMBER, 1919. No. 1.

ORLANDS S. COFFIN, M.D.

Orlands S. Coffin was born November 7, 1857, in Hancock County, Indiana. His parents, Nathan Dix Coffin and Mary H. Coffin, moved from North Carolina to Hancock County, Indiana, in 1839, in a one-horse wagon.

The country was heavily timbered and here was built the home that sheltered these good people and a family of eight children. The father lived to the ripe old age of ninety and the mother to seventy-five years.

Here the subject of our text worked on the farm and attended the country school, called Westland. The terms of that time consisted of three or four months, and when it was extended to five it was considered a long term. Later, in 1878, he was permitted to attend a year in the Academy at Spiceland, Indiana. In the fall of 1880 he began the study of medicine with Dr. S. S. Boots, of Greenfield, Indiana. In 1881-82 he attended lectures at the Indiana Eclectic Medical College, of Indianapolis, from which school he graduated in the spring of 1883. He returned to Greenfield after graduation, forming a partnership with Dr. Boots.

In 1886 he was married to Mary Blackledge, of Rushville, Ind., and later (1887) moved to Carthage, Ind.

In 1903 he did post-graduate work in New York, and on his return moved to Indianapolis, his present residence. Of four brothers, three were Eclectic physicians, one dying in 1867.

The doctor joined the Indiana Eclectic Society in 1884 and the National in 1894, and has been an energetic, untiring member of both.

In religious faith he is a Presbyterian and is now a Scottish Rite Mason and a member of Rapier Commandery, Knights Templar.

A glance at his picture exhibits a genial, kindly disposition, yet he can be firm when necessary. He presents the type of man best exemplified by the family physician.

We bespeak for him a successful administration.

PROCEEDINGS OF THE FORTY-NINTH ANNUAL SESSION OF THE NATIONAL ECLECTIC MEDICAL ASSOCIATION.

Auditorium Hotel, Chicago, Ill., June 17-20, 1919.

The forty-ninth annual session of the National Eclectic Medical Association was called to order at 10:15 A.M., June 17, 1919, in the assembly room of the Auditorium Hotel, Chicago, by the President, Dr. Finley Ellingwood.

Dr. Finley Ellingwood: Ladies, Gentlemen and Friends: By virtue of the authority vested in me by the Constitution and By-Laws of the National Eclectic Medical Association of the United States of America, I will now call to order the forty-ninth annual session of that honorable body. The invocation will be pronounced by Rev. Victor W. Thrall.

Rev. Victor W. Thrall, Ph.D. (Evanston, Ill.): Our Heavenly Father, we would not undertake any great enterprise without asking for Thy guidance. We thank Thee for this group of men and women whose lives are devoted to the healing of disease. We thank Thee for the things they have done for humanity to lengthen life, to heal disease, and to make life more comfortable by saving us from the serious results of disease. We thank Thee for the progress that Thou hast given to these men and women, for the service they have rendered during the great war in being able to strengthen the boys in service and relieve their sufferings. We thank Thee for the open-minded investigation which these men and women do day by day and year by year, in finding ways by which they can bring physical help and strength to suffering humanity. May Thy blessing rest on their deliberations here; help them as they compare notes and report the result of investigations, and may Thy blessing continue to rest upon them year by year. May Thy benediction be upon their President and officers, upon the men and women who present papers and addresses. Grant they may realize their responsibilities, and the privileges which are theirs under the guidance and blessing of the Almighty. Be with them here, and when they return to take up their practice, strengthen them for the tasks before them, give them courage of heart and comfort them in time of discouragement. Bless them here, and finally receive them as Thy servants, in the name of the Lord Jesus Christ. Amen.

The President: At no time in the history of this Association has it been possible to say that the great objective—the real object of students of this method—has not been the search for truth. If in our search for knowledge we find truth, we advance. If we depend upon error, we fail. To determine —to prove that it is truth—to apply the truth in the most specific and definite manner in the cure of disease and relief of human suffering, and finally to spread the truth—to throw it broadcast without the expectation of emolument or gain on the part of the giver—are the basic principles upon which the efforts of this school of medicine are spent.

In our search for the truth in disease and in the application of drugs, medicines and measures for the cure of disease, the special departments of scientific research—chemistry, pharmacy, materia medica and therapeutics—

have been our specific fields. The chemists, the pharmacists and the physician have delved hand in hand. From these fields we bring you our truths in this session of our Association.

From the field of medicine, the essays prepared by the various writers whose names appear on our program will cover the ground in a practical manner. For this we all have striven. The Association is certainly to be congratulated upon the fact that from the fields of pharmacy and chemistry we have been able to secure the most worthy and honored representatives.

For our opening address we are especially honored today, having been able to secure the presence of Dr. James Hartley Beal, Director of Pharmaceutical Research, University of Illinois; at one time Professor of Pharmacy, University of Pittsburgh; late editor of the *American Pharmaceutical Association Journal;* late editor of the *Midland Druggist and Pharmaceutical Review;* late President of the American Pharmaceutical Association and of the Ohio State Pharmaceutical Association; at the present time President of the National Drug Trade Conference, and an extensive pharmaceutical, chemical and general writer.

Dr. Beal comes to us not only with an extensive knowledge of his particular branches, but with a general knowledge of science in all of its applications to pharmacy and medicine. He has long been a friend of the Eclectic method and its principles, in the applications of drugs and pharmaceutical development, in the latter of which he has taken a great personal interest, has closely watched and assisted in all the processes of its evolution. He is in full sympathy with our work. Dr. Beal will now address you.

(Dr. Beal's address is inserted in another portion of this issue.)

The President: If one were to undertake to introduce one so well known as Prof. Lloyd to this audience, it would seem like carrying coals to New Castle, like an act of supererogation. Very few men here but can remember Prof. Lloyd as their teacher. I will not enlarge on the affection that we have for him; you know what it is. I will ask him to respond to the speech that has just been made, and take great pleasure in presenting Prof. John Uri Lloyd, of Cincinnati.

(Prof. Lloyd's address appears elsewhere in this journal.)

Business Session.

The Secretary called the roll of officers and of members to the House of Delegates, announcing a quorum present.

Dr. Adlerman moved that the minutes of the last meeting be approved as printed in the Quarterly. Motion seconded and carried.

The report of the Recording Secretary, Dr. H. H. Helbing, of St. Louis, was read as follows:

Annual Report of the Recording Secretary.

The past year has been a trying one for all of us in our business as well as in our organization, as you will all agree. It has only been within the last two months that any of us have had time to do anything except just what

we were compelled to do, for to do this required us to work from twelve to eighteen hours a day in order to care for the sick.

During the past two months I have sent out two letters each to every delinquent that I could find and have succeeded in reviving some interest among the members.

Owing to the indifference of most State officers, I find that it will be necessary for the National Secretaries to go after delinquents as soon as they find that the State Secretaries do not intend to do that work. I believe that the Corresponding Secretary and the Recording Secretary should alternately write letters to delinquents, especially those one year or more in arrears. I believe four to six letters a year should go to these delinquents.

I would recommend that our membership fee and re-instatement fee be increased to $3.00. I do not see why we should not charge as much as the State, because our expense is as great as the State's. Many of those re-instated obtain the journal for two years, which costs us $1.00 per year to supply, so it is a losing proposition for us to take them at $2.00.

I believe, for the purpose of stirring up interest in States having small membership, that we should hold district meetings at strategic points and invite three or more States to hold their meetings at the designated point, which should be as convenient as is possible for the States participating. In keeping with this idea, I believe it would be wise to choose members of the Propaganda Committee that have a nation-wide reputation, each member of this committee to visit the district meeting or meetings most convenient to him, his expenses to be paid and the total amount to be used not to exceed $240.00 for the whole committee. Each State should not lose its identity, but merely co-operate in this way for their mutual advantage. Let the Executive Committee and the Propaganda Committee arrange these district meetings in various places to be held during the month of May. I believe it is money wasted for the Propaganda Committee to send out literature by mail, for the secretaries do enough promotion by mail to accomplish all that can be accomplished in this manner, in my opinion. What is needed is the personal touch, and I believe good may be accomplished if the right ones are found who will go on the Propaganda Committee and attend these district meetings.

It will be very necessary to economize in our expenditures and see that every dollar spent is put where it will do the most good. In my correspondence I have tried to confine my letters to those who do not receive the QUARTERLY and have no means of knowing what is going on in the National. I feel that our main efforts must be directed toward getting those who are delinquent back into our organization. I believe we will have a fine opportunity to get renewals the coming year, now that the nation is settled and we are more certain of our future.

There has been some inquiry during the past year, as our members return from service for their country, regarding their standing with the National. I would suggest that their standing when they return from the service be

considered the same as when they went away, and they be not charged any dues during the period of their absence.

Respectfully submitted,

H. H. HELBING.

Referred to the House of Delegates.

The report of the Corresponding Secretary was presented as follows:

REPORT OF THE CORRESPONDING SECRETARY.

To the Officers and Members of the National Eclectic Medical Association:

We herewith present to you our tenth annual report as editor. This has been with all of us an exceedingly busy year. The recent epidemic and the unrest and worry consequent upon the world war has left its impress upon us. Though we may not have been active participants, we have felt its impress and the restlessness and uncertainty of the future has a depressing influence upon our ability for work. I feel the pages of the QUARTERLY exhibit this, and we trust that with the advent of peace this depression will be lifted and we may again be able to resume our wonted work with a better spirit and more energy. When one is too tired physically the intellectual powers will not work.

The accounts for the current year were as follows:

1918.	RECEIPTS.		
July 25	Subscription	$ 1.00	
Aug. 25	H. A. Shafor, subscriptions, QUARTERLY	275.00	
Sept. 10	Advertising	152.56	
Dec. 2	Advertising	163.52	
Dec. 5	Subscription	1.00	
Dec. 16	Subscription	2.00	
Dec. 27	H. A. Shafor, subscriptions, QUARTERLY	275.00	
1919.			
Jan. 13	Subscription	1.00	
Feb. 24	H. A. Shafor, subscriptions, QUARTERLY	275.00	
Feb. 26	Advertising	194.23	
Feb. 26	Subscription	1.00	
May 21	H. A. Shafor, subscriptions, QUARTERLY	275.00	
May 30	Advertising	167.54	
June 6	QUARTERLIES	1.00	
	Total		$1,784.85

1918.	EXPENDITURES.		
Aug. 28	Peerless Printing Co., Sept. QUARTERLY	$ 181.65	
	Paper, mailing, etc.	101.52	
Sept. 13	Editor's salary	75.00	
Dec. 3	Peerless Printing Co., Dec. QUARTERLY	161.15	
	Paper, mailing, etc.	100.45	

Dec. 27	Editor's salary	75.00	
Feb. 26	Peerless Printing Co., March QUARTERLY	156.10	
1919.			
Feb. 26	Editor's salary	75.00	
May 29	Peerless Printing Co., June QUARTERLY	161.30	
	Paper, covers, wrappers and mailing	165.69	
May 30	Editor's salary	75.00	
May 30	Stenographer's allowance	100.00	
May 30	Express and postage	28.50	
	Total		$1,565.52
	Balance on hand paid Treasurer		219.33
			$1,784.88

The actual cost of printing and mailing QUARTERLY, exclusive of editor's salary, was $1,088.82, making an actual cost of 90 cents per copy of four numbers, or 22½ cents per copy.

Respectfully submitted,

W. N. MUNDY, *Editor.*

Referred to the House of Delegates.

TREASURER'S REPORT FROM JUNE 1 TO AUGUST 1, 1918.

Submitted by E. G. SHARP, M.D.

RECEIPTS.

June 1	By balance (cash on hand)	$1,113.20	
June 3	By Oklahoma, direct per Helbing	58.00	
June 25	By Oklahoma, per Sharp	2.00	
June 30	By Oklahoma, per Sharp	4.00	
June 30	By Arkansas, per Helbing	46.00	
June 30	By Missouri, per Helbing	95.00	
June 30	By Iowa, per Helbing	18.00	
June 30	By California, per Helbing	28.00	
June 30	By Indiana, per Helbing	12.00	
June 30	By California, per Helbing	2.00	
June 30	By Maine, per Helbing	2.00	
June 30	By W. N. Mundy, rebate on QUARTERLY	266.52	
June 30	By Dr. E. G. Sharp, int. on monthly balance	23.95	
July 12	By Oklahoma, per Sharp	6.00	
	Total		$1,676.67

DISBURSEMENTS.

June 20	To Warrant No. 315, W. N. Mundy	$ 100.00
June 20	To Warrant No. 316 H. H. Helbing	300.00

June 20	To Warrant No. 317 H. G. Sharp.....	10.70	
June 20	To Warrant No. 318 H. H. Helbing.....	13.19	
June 20	To Warrant No. 319 Peerless Co.....	8.50	
June 20	To Warrant No. 324 F. Dillan.....	50.00	
Aug. 1	Total		$ 482.39
Aug. 1	By balance (cash on hand).....		$1,194.28

TREASURER'S REPORT FROM AUGUST 1, 1918, TO JUNE 1, 1919.

Submitted by H. A. SHAFOR, M.D.

RECEIPTS.

Aug. 1	By balance (cash on hand).....	$1,194.28	
June 1	By yearly dues collected.....	1,256.00	
	Total		$2,450.28

DISBURSEMENTS.

Aug. 5	To Warrant No. 320 Am. Surety Co.....$	10.00	
Aug. 26	To Warrant No. 321 W. N. Mundy.....	275.00	
Aug. 28	To Warrant No. 322 F. E. Dillan.....	65.00	
Aug. 23	To Warrant No. 323 H. H. Helbing.....	121.90	
Aug. 24	To Warrant No. 324 inc. in Dr. Sharp's report		
Oct. 23	To Warrant No. 325 F. D. Adlerman.....	4.00	
Oct. 23	To Warrant No. 326 H. H. Helbing.....	38.33	
Jan. 1	To Warrant No. 327 W. N. Mundy.....	275.00	
Jan. 1	To Warrant No. 328 H. A. Shafor.....	4.13	
Feb. 26	To Warrant No. 329 W. N. Mundy.....	275.00	
Mch. 18	To Warrant No.330 F. D. Adlerman.....	3.50	
May 2	To Warrant No. 331 H. H. Helbing.....	38.03	
May 20	To Warrant No. 332 W. N. Mundy.....	275.00	
	Total		$1,384.89
	By balance, cash on hand.....		$1,065.39
Interest			24.12
	Total balance, cash on hand.....		$1,089.51

Respectfully submitted,

H. A. SHAFOR, M.D., *Treasurer.*

Referred to House of Delegates.

Report of Committee on Propaganda.

By Dr. E. G. Sharp, of Oklahoma.

This committee was created at your last meeting. Not being in the House of Delegates, and no detailed instructions having been given us, the committee was left to make its own interpretation of what it should attempt. After some correspondence the committee decided on a letter of general import.

It is due the association that some explanation be made concerning the delay in getting work done.

The executive officer expressed a desire to have a letter sent out before the meeting, inasmuch as our appropriation would not justify much expense.

War conditions, unusual amount of general illness and consequent work thrust upon practitioners made it next to impossible to get any concerted action or to get work done after it was outlined.

For these reasons the propaganda work was late and not as extensive as needed or as the time would apparently justify.

It is the opinion of your committee that this is a very important part of your work as a national body. It is becoming more and more apparent that personal effort among our men and liberal physicians is essential.

If this committee could be permanent, not appointive; if it could be so organized that some plan would be in operation all the time, then more effective and a much larger volume of work could be attempted. If dues are increased it should have fifty per cent. of the increase or at least $300 for its expenses.

As we see it now there are several objects to be accomplished.

(a) A more cohesive organization.

(b) More personal appeals to our men.

(c) More effort through our Quarterly and other journals.

(d) Well prepared and brief propaganda material—issued by any and all of our publishers, the office of the president, secretaries and your committee.

Official and non-official organization appeals of general and personal character; articles of importance culled from literature or prepared for such use might be sent frequently and in considerable volume under one-cent postage rates.

There is always space and demand for more editorial articles in the Quarterly, and the editor is more than glad to have such matter.

There are none of our publications which would not co-operate at least on an actual cost basis.

It is important that we consider or devise some means to finance such work. It is absolute folly to ask a committee to do a certain kind of work and limit its activity by such an appropriation as to render its work ineffective and your committee helpless.

This should be a broad work. Its plans and development are capable of much good if we make conditions favorable.

The expenditures of the committee are as follows:

Printing—	
64,000 envelope circulars	$ 44.80
8,000 envelopes	23.50
8,000 circular letters	24.50
Addressing 8,000 envelopes	32.50
Folding, filling and stamping 8,000 circulars	26.00
Stamps—	
1,500 three-cent	$45.00
6,200 one-cent	62.00— 110.00
Total	$259.30

N. B.—Sealed letters were mailed to the membership only.

Wm. P. Best, M.D., *Chairman.*
E. G. Sharp, M.D.,
W. E. Kinnett, M.D.,
Committee.

Referred to House of Delegates.

Report of Council of Medical Education.

To the Officers and Members of the National Eclectic Medical Association:

The Council of Medical Education begs to submit the following report. Two calls for donations were issued by the council, which resulted in the following collections:

Connecticut.

Dr. S. Tommasello	$ 5.00
Dr. S. L. Katzoff	3.00
Dr. E. H. Marsh	5.00
Dr. Chas. Kelley	10.00
Dr. S. L. Katzoff	5.00
Dr. Chas. Kelley	10.00
	$38.00

Indiana.

Dr. J. W. Lorenz	5.00
Dr. T. Crandell	1.00
	$ 6.00

California.

Dr. H. T. Cox	10.00
Dr. E. H. Mercer	5.00
	$15.00

Texas.

Dr. G. M. Williams	5.00
Dr. W. W. Wimer	10.00
Dr. H. H. Blankemeyer	10.00
Dr. C. Schultz	5.00
Dr. N. M. Dewees	10.00
Texas Ecl. Med. Association	25.00
	$65.00

New York.

Dr. T. J. Herr	5.00
Dr. H. Herr	5.00
Dr. P. J. Reinle	50.00
Dr. F. A. Greene	100.00
Dr. Ira Hawley	5.00
Dr. E. H. King	5.00
Dr. S. Tommasello	5.00
Dr. A. B. Wolf	5.00
Dr. W. I. Louis	10.00
Dr. L. B. Dawley	5.00
Dr. A. E. Broga	22.00
Dr. H. J. Terpening	5.00
New York State Eclectic Asso.	25.00
	$247.00

Illinois.

Dr. F. O. Harrison	5.00
Dr. R. Lambert	3.00
Dr. J. B. Mathew	5.00
	$13.00

South Dakota.

Dr. W. P. Collins	25.00
Dr. H. A. Krieger	5.00
	$30.00

Michigan.

Dr. W. L. Marks	5.00

Pennsylvania.

Dr. E. J. Dech	10.00
M. B. Shultz	5.00
G. B. Shivery	10.00
Dr. E. F. Shaulis	25.00
Dr. T. O. Glenn	10.00
Dr. E R. Blough	5.00
	$55.00

Ohio.

Dr. J. F. Conrad	5.00
H. T. Wiedman	5.00
Drs. W. B. and H. C. Duke	10.00
Dr. C. W. Holtzmuller	10.00
Dr. A. S. Stemler	10.00
Dr. E. A. Wolf	25.00
Dr. A. B. Basinger	10.00
	$75.00

Georgia.

Dr. A. F. White	5.00
Dr. A. Fleming	3.00
Dr. D. H. Griffith	2.00
	$10.00

Arkansas.

Dr. J. W. Yancey	5.00
Dr. R. O. Norris	10.00
Dr. W. M. Weatheral	5.00
	$20.00

Alabama.

Dr. J. S. Crow	2.00

Iowa.

Dr. G. F. Sever	10.00
Dr. Chas. F. Thompson	25.00
L. L. Gadd	10.00
	$45.00

Oklahoma.

Dr. D. Watts	5.00
Dr. J. S. Leachman	5.00
Dr. B. Watts	5.00
Dr. C. M. Candler	10.00
Interest	.35
	$25.35

Washington, D C.

Dr. G. T. Sharp	10.00

Kansas.

Dr. G. R. Dean	10.00
J. P. King	5.00
	$15.00

Massachusetts.

Dr. J. Frazer Barbrick	25.00

Tennessee.

Dr. J. P. Harvill	5.00

Wisconsin.

Dr. H. R. Blay	10.00
J. B. Brower	5.00
	$15.00

Nebraska.

Dr. P. A. DeOgny	20.00

Spokane, Washington.

J. W. Cosford	10.00

Canada.

Dr. J. Gordon Bennett	25.00

Florida.

Dr. N. P. Meyers	5.00

Kentucky.

Dr. G. L. Eberley	5.00

Total	$ 796.35
Interest	14.12
Total	$ 810.47
Previously acknowledged	$1,217.54
Grand total	$2,028.01
Paid to the U. S. Government for Savings Stamps	$ 836.00
Balance on hand at bank	$1,191.01
Funds held by Dr. O. S. Coffin	$ 382.00
Charges on checks—$3.60.	$1,573.01

Respectfully submitted,

THEODORE DAVIS ADLERMAN, M.D., *Chairman,*
O. S. COFFIN, M.D.,
E. G. SHARP, M.D., Committee.

Brooklyn Trust Company.

Bedford Branch

Certificate of Balance. $1,191.01

We hereby certify that at the close of business on May 31st, 1919, the sum of Eleven hundred and ninety-one and 01/100 dollars was on deposit with this Company to the credit of and belonging to the Council of Medical Education.

WM. A. MIEROW, Bookkeeper. E. C. SCHMIDT, Asst. Secretary.

No. 1297 Brooklyn, N. Y., July 16, 1918.

Brooklyn Trust Co.

Bedford Branch

Pay to the order of Brooklyn Trust Co., Bedford Branch, Eight hundred and thirty-six dollars.

$836.00 Council of Medical Education,
T. D. Adlerman, Chairman.

We recommend that $1,000 of this fund be granted to the Eclectic Medical College of Cincinnati, O.

T. D. Adlerman, M.D.,
O. S. Coffin, M.D.,
E. G. Sharp, M.D.,
Council of Medical Education.

Referred to House of Delegates.

The president then appointed as a Credentials Committee W. E. Daniels, J. P. Harvill, W. R. Schussler.

Adjournment until two o'clock p. m.

Tuesday Afternoon Session.

section on medicine.

Chairman.....Rolla L. Thomas, M.D.
Vice-Chairman.....Wm. P. Best, M.D.
Secretary.....H. S. Lowrance, M.D.

Dr. Rolla L. Thomas, in opening the section, said:

I want to make three points—to prove what we claim as Eclectics. A little less than one hundred years ago Eclecticism was organized, and they adopted the principle, or the slogan, that disease, wherever met and in whatever form manifested, lowered vitality and lessened the individual's power of living, and that any remedy or remedies, that any method of treatment that still further lowered the patient's vitality should be discredited, and that every remedy should conserve vitality and help restore the patient. To my mind that is the greatest factor in the practice of medicine, regardless of schools. Whenever a physician sits down beside his patient and examines him and is ready to prescribe he should have in mind the fact that the remedy he gives must conserve and not destroy. We only have to refer to one disease to prove that the remedies that are successful are those that build up and not tear down. Any patient that is sick has enough of a load without still further depressing him. We will take the disease referred to—

pneumonia. You heard this morning in that remarkable address—an address that if we got nothing else would be worth the trip to Chicago—that in the treatment of pneumonia back fifty or seventy-five years ago blood letting was always done. And do you know that the mortality in pneumonia has progressively increased right along from that time to the present? Why is the mortality increased? I would not say it was altogether due to bad medication; there are other conditions. Times have changed. Seventy-five years ago one in twelve lived in the cities, today one in three. Environment has something to do with it. Fifty years ago there were not so many alcoholic drinks and narcotics taken. But more than fifty per cent. of the increased mortality is due to bad medication. I think that can be readily proved. You remember how they changed from one thing to another. In the old days when they let blood pneumonia was considered chiefly a lung disease with systemic disturbances. Then they decided that it was not a lung trouble, but the high fever that caused the mortality—and the mortality went up still further. And then they recognized that the depressing treatment was causing the mortality, and they said it was not the high fever, but the weak condition of the heart. Then came in a decade of stimulants, strychnia and digitalis, and still the mortality went up. These remedies increased the load the patient was already carrying. So there is a reason why the mortlity is less under certain lines of treatment than others. We want to be charitable. I do not believe in saying harsh things about people who are doing the best they can. I am inclined to think these old practitioners and the practitioners of other schools are kind men; they do want to do and perhaps do the best they can, and so I would not say that the so-called regular schools have not done wonderful work in these years—they have. They have gone into their laboratories and given to the medical world splendid things that we need; they have given us new methods of diagnosis; they have found causes of disease. But I am inclined to think a sick world is more interested in being cured than in finding out what is the matter, and so while we give them credit for the splendid work they have done I say without any harshness that the newer schools with the idea that disease is depressing and that the remedy must stimulate are wrong and we must change it.

What is disease any way? We will say that disease is changed function. We can measure disease in three ways—change of function, excessive functional activity and change of the condition of the blood. You take an infective disease, a specific disease, and you have toxicity. We have three ways of measuring disease conditions and determining the results, and we find that we measure these changes by the language of the condition. Everything has a language, animate and inanimate. Cuvier could look at a bone and name the animal. Why? Because the bone told him. You take the old tablets of Memphis and Thebes that lay unknown for years, and yet the language was there in hieroglyphics. A diseased condition has a language, and the doctor must be a good linguist; he must know the dead language

and also the living language of the disease—the symptoms that tell him certain things. Here we have the theory of specific medicine—treating symptoms. I do not want you to understand that we are not people who diagnose disease. The best physician is the best diagnostician, other things being equal. But the physician who goes to the bedside of his flu patient, his pneumonia patient, and reads the condition of his patient—not that he has flu or pneumonia or typhoid—but the conditions that call for remedies that have been proven over and over as successful in those conditions—that man is practicing medicine by the symptoms of disease.

So this afternoon we expect to have papers read in different sections on different diseases. I believe you will see the power and efficacy of Eclectic treatment, of specific medication.

Margarethe Wilkenloh read a paper entitled "Treatment of 500 Goiter Cases."

Discussion by Dr. Sievers.

Moved by Dr. N. A. Graves that all papers on pneumonia be deferred until Wednesday morning and be included in the pneumonia symposium. Motion seconded and carried.

Dr. O. C. Baird, Chanute, Kan., read a paper entitled "Treatment of Erysipelas."

Discussion by Drs. Neifer, Schussler, Van Nette, Rogers, Mundy, McCann, Crowell, Harris and Kinnett.

Dr. C. Woodward, Chicago, read a paper entitled "Clinical Observation of Cell Atony."

No discussion.

BUSINESS SESSION.

Prof. John Uri Lloyd presented a resolution extending a vote of thanks to Prof. Beal for his able address, and that he be made an honorary member of this association.

The motion was recommended for adoption by the House of Delegates and adopted unanimously.

Dr. Adlerman moved that section three (3) of Article VI of the Constitution be amended by striking out the words "to be appointed by the president" and inserting in lieu of them "elected by the House of Delegates."

Referred to the House of Delegates.

Dr. Mundy presented the following amendment to the Constitution:

Resolved; That Article VI of the Constitution, "Reports and Essays," be amended by the addition of the following words after Quarterly in the last line of said Article VI: "No member shall present a paper or report by synopsis or verbally, unless he shall have prepared such paper or report and delivered such manuscript either to the section officers or secretary of the association."

Referred to the House of Delegates.

Dr. H. H. Helbing offered the following resolution:

Resolved: That we deplore the fact that there is an effort being made

to nullify the war time prohibition act. That we endorse the prohibition of the manufacture and sale of beverages containing 2¾ per cent. alcohol, believing that it is detrimental to the health and welfare of our nation.

Referred to the House of Delegates.

Dr. J. E. Callaway, for the House of Delegates, reported favorably on the resolution of Dr. H. H. Helbing. Moved by Dr. B. E. Dawson that the resolution be adopted. Motion seconded and unanimously carried.

Dr. R. J. Lambert, for the House of Delegates, presented the amendment to the Constitution offered by Dr. Mundy and moved its adoption. Motion seconded and carried unanimously.

Article VI of the Constitution as amended and adopted reads as follows:

Article VI.—Reports and Essays.

Within three months after the close of each Association, the President shall designate members as chairmen and secretaries of the several sections, whose duty it shall be to procure papers and reports for their respective sections, to be submitted at the ensuing annual session. Every member of the Association, however, may communicate to the Association or its Secretary, such discoveries, improvements, suggestions and interesting cases as he shall consider useful, and may present papers or essays on topics connected with medical science or practice, and the same, whenever judged of sufficient importance, may be published in the Quarterly. No member shall, however, present a paper or report by synopsis or verbally, unless he shall have prepared such paper or report, and delivered such manuscript either to the section officers or secretary of the Association.

SECTION ON SURGERY.

Dr. W. R. Schussler read a paper on "Post-Operative Complications."

Discussion by Drs. Wilmeth, Barwick, Dawson, Mundy, Coffin, Sherman, Brunk and Baird.

Adjournment until nine o'clock Wednesday morning.

Wednesday Morning Session.

Called to order at nine o'clock by the President.

Dr. H. H. Helbing read a paper entitled "Ectopic Gestation."

There was no discussion of this paper.

The President: We will take up this morning the consideration of the poliomyelitis problem, and I have great pleasure in introducing to you Dr. C. W. East, of Springfield, Ill., chief of the Illinois Department of Public Health, Division of Child Hygiene. He is a personal friend of mine and has been, until recently, a neighbor for many years. It is therefore a special pleasure to me to have him with us this morning.

(This article appears in this issue.)

Dr. W. P. Best, Indianapolis, read a paper entitled "Care of Patients After Surgery."

Discussed by Drs. Helbing, Kinnett, Larsen, Holmes, Sharp, Barwick and Franklin.

Dr. Earl Holman, Indianapolis, Ind., read a paper entitled "Fractures of Wrist and Ankle; Complications and Care."

The paper was discussed by Drs. Brunk and Burnett.

Adjourned until 8 p. m.

The Wednesday evening session was devoted to articles by Chas. G. Merrell and Dr. Horwitz, which appear in this number.

THURSDAY MORNING SESSION.

The Thursday morning session was called to order by the President at 9:10.

Dr. T. D. Adlerman read the report of the committee to make the Propaganda Committee a permanent committee, and moved its adoption. Motion seconded by Dr. Best and carried.

Article V as now amended reads as follows:

The Committee of Propaganda and Organization shall consist of four members of the National Association elected by the House of Delegates. This committee to do such propaganda and organization work as they may see fit. This committee shall elect their own officers and shall do its work independently of the Executive Committee. The expenses of this committee not to exceed $240 for the year, to be paid by the National Association.

Dr. R. J. Lambert introduced a resolution that the secretary be made permanent chairman of the Committee of Arrangements, as follows:

"Inasmuch as it is necessary for the national Secretary to be fully informed and to understand all arrangements for the annual meeting and entertainments for members and guests, also an advantage in the collection of dues and securing of application for membership, to maintain a registration desk at the annual meeting.

Be it resolved: That the national recording secretary be made a permanent member of the Arrangement and Entertainment Committee, that he may have power to collect a guest registration fee of $1 from all visitors who attend our meetings and take part in the entertainments provided; and to have a record of all members in attendance at meeting, and collect dues from members in arrears before issuing a receipt entitling member to register. The registration or guest fee to be used to pay necessary expenses required in maintaining the registration desk."

Dr. H. H. Helbing introduced a resolution endorsing the work of the Public Health Department of Chicago.

Resolved: That we endorse the Health Department of the city of Chicago and Health Commissioner John Dill Robertson, M.D., who has rendered such efficient service to the citizens of Chicago, and whose progressive ideas in the conduct of the various institutions under his direction are worthy of recommendation to other health departments of other cities.

Both referred to the House of Delegates.

Dr. H. H. Helburg introduced a resolution relating to the use of opium as follows:

Whereas, The use of opium and its derivatives by physicians masks the symptoms of dangerous diseases, and is the means of causing physicians to be lax in their efforts to cure many painful diseases; and

Whereas, The use of these narcotics tends to produce drug fiends; therefore

Be it resolved, by the National Eclectic Medical Association in convention assembled that we favor the stoppage of the importation into, and the sale of opium and its derivatives in, the United States.

Referred to House of Delegates.

SECTION ON PHARMACOLOGY, MATERIA MEDICA AND THERAPEUTICS.

Chairman.....R. J. Lambert, M.D., St. Charles, Ill.
Vice Chairman.....W. E. Kinnett, M.D., Peoria, Ill.
Secretary.....A. F. Stephens, M.D., St. Louis, Mo.

Session opened by remarks by Prof. J. U. Lloyd, followed by a symposium on "Treatment of Pneumonia." (Prof. Lloyd's remarks appear in this issue.)

Drs. W. J. Pollock, Chicago, and W. N. Mundy, Forest, O., read papers on "The Treatment of Pneumonia."

Dr. E. G. Sharp read a paper on "Bryonia."

Dr. J. D. McCann, Monticello, Ind., read a paper on "Asclepias."

Dr. W. E. Daniels, Madison, S. D.' read a paper on "Vertarum." Discussion participated in by Drs. Graves Thomas; Holmes, of Pennsylvania; Bannock, Schussler, Coley, Best, Hufnail, Goss and Ellingwood.

Influenza. Dr. O. E. Coffin. Discussed by Drs. Holmes and Lambert.

Adjourned until 2 P. M.

THURSDAY AFTERNOON SESSION.

Called to order at 2:15 by the president.

Dr. J. C. Mitchell reported the action of the House of Delegates on the financial report of the Committee on Medical Education as follows:

We have audited the accounts of the Council of Medical Education, and find them correct, and the balance in the hands of the council as exhibited by the receipts from the bank.

We also recommend that the suggestion to give to the Eclectic Medical College of Cincinnati $1,000 of the funds in their hands be concurred in.

J. C. Mitchell,
G. R. Miller,
Committee.

Motion seconded and carried.

Dr. R. L. Thomas reported the resolution regarding venereal disease and moved its adoption.

Resolution as follows:

Whereas, Venereal diseases are more a menace to the welfare of the nation than are other contagious and infectious diseases; and

Whereas, The United States Government is making efforts to control the spread of these diseases, therefore be it

Resolved, That we co-operate with the health officers of our nation in every way possible; and be it further

Resolved, That we recommend to all our state Legislatures that strict laws be passed looking toward the suppression of these diseases.

Motion seconded and carried.

Dr. Wm. P. Best reported the motion regarding the report of the corresponding secretary and moved its adoption.

Report:

Your committee to whom was referred the recording secretary's report would commend the efforts of the officer in his endeavor to keep intact and increase our membership.

The N. E. M. Association must not be made to suffer through inaction or inefficiency of state officers; and where they do not, the national should collect dues.

We would not recommend any change in fees at the present time.

Respectfully,

WM. P. BEST,
M. E. DANIELS,
Committee.

Motion seconded and carried.

Dr. Munch read the resolution concerning the propaganda committee, and moved its adoption.

We, your committee to whom was referred the report of the Propaganda Committee, hereby return the report, and, with the following suggestions, recommend its adoption.

1. We recommend that expenses incurred by the committee of two hundred and sixty-three dollars and thirty cents ($263.30), which is slightly in excess of the appropriation allowed for this purpose, be authorized and paid by this association.

2. We recommend that future efforts of the committee be devoted not only to arousing the interest of delinquent members, but also to *active* propaganda work in placing before the recent graduates of all medical schools the value of a broad materia medica and therapeutics, opening the doors of our State and National Associations to them for membership.

3. We recommend that said propaganda be extended to public men and women of each state in the Union; state, city and county officials; and teachers in educational institutions.

4. We further commend that any or all propaganda now in the possession of the association shall be appropriated by the Propaganda Committee as they in their opinion see fit.

WILMUTH,
HUFNAIL,
Committee.

Motion seconded and carried.

Dr. E. G. Sharp presented the resolution in regard to Dr. Beal's address, and moved its adoption.

Whereas, We believe the address of Professor Beal, president of the American Pharmaceutical Association, to this association is such very splendid propaganda material; therefore, be it

Resolved, That the editor of the QUARTERLY be authorized to arrange for furnishing, at cost of publication, reprints of said address to all those who desire the same. SHARP.

Motion seconded and carried.

Dr. F. L. Wilmeth read the resolution endorsing the public health department, and moved its adoption. Motion seconded and carried.

SECTION ON NERVOUS AND MENTAL DISEASES.

Chairman.....T. D. ADLERMAN, M.D., Brooklyn, N. Y.
Vice Chairman.....F. S. PECK, M.D., Oklahoma City, Okla.
Secretary.....S. M. SHERMAN, M.D., Columbus, O.

Dr. Wm. P. Best read a paper entitled "The Spine." No discussion.

Dr. Finley Ellingwood read a paper entitled "The Treatment of Acute Neuritis."

Dr. T. D. Adlerman, New York, read a paper entitled "Sexual Neuroses." Discussed by Drs. Holman and Dawson.

Dr. W. N. Mundy, Forest, O., read a paper entitled "Chorea." Discussion by Drs. R. E. Holmes, H. M. Powers and Holman.

SECTION ON DISEASES OF CHILDREN.

Chairman.....W. N. MUNDY, M.D., Forest, O.
Vice Chairman.....F. S. PECK, M.D., Oklahoma City, Okla.
Secretary.....B. K. JONES, M.D., Kenton, O.

Dr. Ivadell Rogers, Pryor, Okla., read a paper entitled "The Hughes Bill; Influence on Child Life." There was no discussion on this paper.

SECTION ON DISEASES OF WOMEN AND GYNECOLOGY.

Chairman.....T. D. HOLLINGSWORTH, M.D., Akron, O.
Vice Chairman..NANNIE M. GLENN, M.D., State College, Pa.
Secretary.....W. E. DANIELS, M.D., Madison, S. D.

Dr. W. E. Daniels, Madison, S. D., read a paper entitled "City and Country Obstetrical Practice." Discussed by Drs. Kinnett, Mundy, Wagoner, Wright and Briney.

Dr. R. J. Lambert, St. Charles, Ill., "Results in Obstetrics—Hospital vs. Home Practice."

J. W. Pruett, M.D., St. Louis, Mo., "Management of Puerpereal Eclampsia." Discussed by Drs. Ellingwood, Daniels and Woodward.

Dr. T. L. Brunk, Alton, Ill., read a paper entitled "Rational Medical Training to Maintain High Mental Efficiency."

Adjournment until 8:00 P. M.

THURSDAY EVENING SESSION.

Called to order at 8:15 by the president. The program consisted of several talks on "Eclectic Methods of Treatment."

Dr. N. A. Graves, Chicago, Ill., "Cough."

Dr. T. D. Adlerman read a paper entitled "A Plea for Psychotherapy."

Dr. R. J. Lambert read a paper, "Study of Therapeutics."

E. G. Trowbridge, M.D., "A Plea for the Tonsils."

Dr. B. E. Dawson, "Eclectic Methods."

Adjournment until Friday morning.

FRIDAY MORNING SESSION.

The Friday morning session was called to order at eleven o'clock to hear the report of the House of Delegates.

A further report on the report of the Propaganda Committee was accepted as follows:

Whereas, The number of graduates of Eclectic Medical Colleges does not nearly equal the number lost to us by death of our older practitioners; and

Whereas, The medical departments of many of our state universities and old school colleges have practically discontinued the teaching of *materia medica* and therapeutics.

Whereas, Most of the present-day graduates in old school medicine enter practice with little or no practical knowledge of the application of remedial agents to disease conditions;

Whereas, Eclecticism possesses a definite and exact system of therapeutics that has been developed through the past, and that is now recognized by all progressive medical men; and,

Whereas, The prejudices that formerly existed against Eclecticism in the minds of our old school physicians have largely died out, and they have become receptive to our system of therapeutics and the medical treatment of disease and investigators of our literature;

Resolved, That it is the sense of this association that the Propaganda Committee of this association should make especial efforts, through our journals and special literature, to encourage membership in our associations of all liberal minded progressive graduate physicians of the United States.

SHARP.

Dr. Wilmuth offered a resolution with the object of organizing an Eclectic Surgical Society, the same to be affiliated with the National Eclectic Medical Association. The resolution was referred to the House of Delegates.

Dr. Glenn, from the Auditing Committee, recommended that the excess in expenditures of $23.30 above the appropriation by the Propaganda Committee be paid. Recommendation adopted.

Dr. Glenn, from the Auditing Committee reported that the accounts of the Council on Medical Education was correct as stated. Report adopted.

Dr. Glenn, of the Auditing Committee, submitted the following report on the treasurer's accounts, which was adopted:

In auditing the accounts of the treasurer, we have not been able to accomplish much, on account of the new treasurer, Dr. Shafor, not having brought

his cash book. Through a misunderstanding, he did not know it would be required.

We find that Dr. Sharp had charge of the office for June and July, 1918. He has made a report of his receipts and disbursements, which is included in the present yearly report of the treasurer. In Dr. Sharp's report we find that it commences with a balance, June 1, 1918, of $1,113.20, instead of $1,095.20, as shown by the treasurer's report of last year. This is an error of $18 in favor of the association. It has been required by this association that its money be kept on interest, and as no interest was shown in Dr. Sharp's report, he has magnanimously given the association the $18 in lieu thereof, and asks that the money be turned over to Dr. Shafor and stand as reported. We recommend that this be accepted.

We have checked the disbursements of the present treasurer, and find that he has vouchers for them all. We can not check the receipts for the reason stated above, and would recommend that his cash book be referred to the new Finance Committee for this purpose.

We would suggest that a receipted bill be required in every case of disbursement.

We would call the attention of the association to the fact that this last year the receipts were about $1,823 and the disbursements about $1,867.

For the coming year we will have expenditures of $1,100 for the QUARTERLY; Propaganda Committee, $263.30; stenographer, reporting of minutes of this meeting, $125; recording secretary, $200. Total, $1,688.30. We have a balance, June 1, 1919, of $1,089.51.

We would recommend that a budget be made up each year.

J. C. MITCHELL,
W. S. GLENN.

Dr. Glenn, from the Auditing Committee, on accounts of editor of QUARTERLY, reported as follows, which report was adopted:

We, the Auditing Committee, have examined the report of the QUARTERLY editor, and find receipts to be $1,784.85; disbursements to be $1,565.52. Balance, $219.33, returned to the treasurer.

J. C. MITCHELL,
W. S. GLENN.

Reports adopted.

Dr. Wilmuth, from the House of Delegates, reported favorably on resolution to form an Association of Eclectic Surgeons. The report as adopted was as follows:

Officers of the association shall be president, vice-president, secretary and treasurer, whose duties shall be those incumbent upon such officers; and that the time and place of meeting shall be the same as that of the National Eclectic Medical Association, of which they are an auxiliary. Applications for membership shall be approved by an Eligibility Committee. Said Eligibility Committee shall be elected at the annual meetings of the association, and shall consist of five members, elected for the period of one year. Fees, membership and arrangements for annual meetings shall repose in the hands

of the Executive Committee. The committee of five on eligibility appointed are Drs. Wilmeth, Helgren, Hufnail and Kannel. The name of the association shall be American Association of Eclectic Surgeons.

Report adopted.

The report of the Credential Committee was as follows, and on motion the same were elected.

Arkansas.

C. L. Billingsley, Ashflat.
R. L. Hudspeth, Emmett.

California.

Harriett G. McGraw, Los Angeles.
Augusta Stone, Los Angeles.

Florida.

H. F. Preston, Melrose.
Maurice Weintraub, Jacksonville.
Claude Reynolds, Zolfo Springs.
B. D. Spears, Zolfo Springs.
P. T. McClellan, Welbourne.
Mart Hammond, Boca Grande.
W. M. Goodson, Holt.

Georgia.

H. D. Liles, Oakwood.
Emmett Irwin, Blakely.
Virgil Nash, Lawrenceville.
Dr. Edwards, Doraum.
H. G. Maxeys, Maxeys.
W. C. Chastain, Buckhead.
J. A Hughes, Woodstock.
J. L. Roback, Jonesboro.
Samuel Green, Atlanta.
J. R. Arrington, Murrayville.
A. A. O'Bannon, Pavo.

Illinois.

Eva Shaver, Chicago.
M. K. Wilkenloh, Chicago.
R. G. Schroth, Chicago.
E. J. Walsh, Chicago.
Thos. Walsh, Chicago.
John E. Walsh, Glenco.
W. C. Jones, Chicago.
J. B. Davis, Chicago.
E. J Harris, Chicago.
R. Wagner, Chicago.
F. K. Martin, Havana.
D. Brewer, Fairbury.
F. Moench, Rushville.
Thos. Brunk, Alton.
J. F. Forbes, Chicago.
H. E. Beck, Chicago
C. E. Sharp, Elgin

Indiana.

Frank Seal, Brookville.
S. D. Sluyter, Wolcott.
F. W. Moses, Indianapolis.

Kentucky.

E. A. North, Newport.
E. Northcutt, Lexington.

Michigan.

L. E. Pangburn, Detroit.
W. B. House, Saugatuck.
H. G. Palmer, Detroit.

Missouri.

C. B. Ellis, Kansas City.

Nebraska.

J. M. S. Chesshire, Overton.
C. W. Sherfey, Lincoln.
Geo. Lang, Lincoln.
H. S. Bartholomew, Marion.
H. Stretton, Chester.
F. E. Gordon, Lincoln.

Ohio.

A. S. Horowitz, Cincinnati.
G. R. Fromm, Cincinnati.
Geo. Strobach, Cincinnati.
R. H. Grace, Dennison.
C. G. Merrill, Cincinnati.
Ralph H. Vance, Pleasant Plain.
Cyril O. Dozer, Cincinnati, care of St. Mary's Hospital.
J. W. Arbegast, Bellefontaine.
W. H. Gaskins, New Richmond.
Albert Schwartz, 1638 Vine St., Cincinnati.
Ralph H. Vaner, Pleasant Plain.

Oklahoma.

L. H. Henley, Claremore.

New York.

H. E. Elwood, Corning.
Leonard A. Jaslow, New York.
J. Short, Buffalo.
F. L. Fuchs, New York. .
C. C. Roosa, Buffalo.

South Dakota.

J. A. Schulte, Aberdeen.

Tennessee.

Geo. H. Hite, Jr., Madison Station.

Texas.

F. E. Hird, Kansas City, Mo.
L. L. Scothom, Dallas.
H. B. Mason, Temple.
H. V Helbing, Ft. Worth.
C. G. Williams, Merkle.

W. Virginia

G. R. Mille, Fairview.

Reinstatements at Chicago, June 17-20, 1919.

G. M. Meyers, Jet, Okla----------1919
W. T. Gleason, Fairview, Okla----1918
M. A. Carriker, Nebraska City, Nebraska ----------1919
M. A. McKendree, Bowling Green, Ohio ----------1919
A. H. Nesbit, Dayton, O----------1919
John Swanson, Cincinnati, O-----1919
C. S. Amidon, Mechanicsburg, O--1919
H. H. Morgan, Portsmouth, O----1919
F. M. Sponseller, Wellington, O----1919
E. E. Bechtel, Dayton, O--------1919
R. B. Crawford, Chicago, Ill------1919
O. J. Vallicott, Republican City, Nebraska ----------1919
J. E. Bowman, Loop City, Neb----1919
C. W. Watson, Eastland, Tex------1919
A. S. Alderson, Thayer, Ill--------1919
W. R. Schussler, Chicago, Ill----1919
W. Leming, Tucumcari, N. Mex--1919
Allen Bush, Morgantown, W. Va--1919
Wm. L. Leboy, Chicago, Ill------1919
C. W. Rodecker, Holcombe, Wis..1919
Thos. Crosten, Lucas, Iowa------1919
A. D. Blagden, Sycamore, Ill-----1919
Geo. D. Hoschoner, Eckley, Colo--1919
S. G. Boyce, Little Rock, Ark------1920
T. E. Jefferey, Ft. Smith, Ark----1920
Ira Wheeler, Fresno, Cal----------1920
E. C. Bond, Hanford, Cal-------..1920
J. P. Martin, Stockton, Cal------1920
A. J. Nellans, Shelburn, Ind------1920
N. LaDoit Johnson, Chicago, Ill--1919
C. L. Sturdevant, Atkinson, Neb--1920
E. R. Harvey, Long Beach, Cal---1920
L. E. Rauch, Long Beach, Cal------1920
A. O. Conrad, Glendale, Cal------1920
L. L. Haight, Los Angeles, Cal----1920
R. P. Baker, Los Angeles, Cal.---1920
J. M. Keys, Omaha, Neb----------1919
L. P. Baker, Atlanta, Ga----------1920
S. T. Biggers, Atlanta, Ga--------1920
J. W. Delay, Rome, Ga----------1920
Paul McDonald, Bolton, Ga-----1920
Ella M. Caryl, Los Angeles, Cal--1919
W. N. Holmes, Nashville, Tenn--1919
E. E. Brunson, Ganges, Tenn-----1919
W. B. Selden, Thorpe, Wis-------1919
W. E. Aubuchon, Franclay, Mo---1920
C. S. Glover, Russellville, Mo----1920
J. S. Rinehart, Lexington, Mo----1920
G. W. Tremaine, St. Louis, Mo--1920
J. M. T. Smith, Poplar Bluff, Mo--1920
J. L. Ingram, St. Louis, Mo-------1920
O. E. Amos, Jefferson City, Mo.---1920
W. G. Wood, St. Louis, Mo-------1920
T. L. Glover, Eugene, Mo--------1920
W. A. Smith, St. Louis, Mo------1920
Hamilton Mason, Wenonah, N. J--1919
A. A. Dewey, Bristol, Conn-------1920

J. W. Reynolds, Marysville, Tex.
S. T. Dodge, Corpus Christi, Tex.
Honorary: J. H. Beal, Urbana, Ill.

The report of the committee on nomination was read as follows:

President, O. S. Coffin, Indianapolis.

First vice-president, F. B. Crowell, Lawrence, Mich.

Second vice-president, R. J. Lambert, St. Charles, Ill.

Third vice-president, F. L. Hufnail, Minneapolis.

Recording secretary, H. H. Helbing, St. Louis.

Corresponding secretary, W. N. Mundy, Forest, O.

Treasurer, H. A. Shafor, Detroit.

Three members Propaganda Committee: W. P. Best, Indianapolis; T. D. Adlerman, New York; H. H. Blankmeyer, Aransas Pass, Tex.

Three members Council on Medical Education: Geo. A. Munch, Tampa, Fla.; E. G. Sharp, Guthrie, Okla.; R. J. Lambert, St. Charles, Ill.

Place of meeting—Atlanta, Ga.

Moved by Dr. T. D. Adlerman that these officers be declared elected. Motion seconded and carried.

Moved by Dr. T. D. Adlerman that a vote of thanks be extended to the retiring officers. Motion seconded and carried.

Moved by Dr. Wm. P. Best that a vote of thanks and general appreciation be extended to the municipal authorities of the city of Chicago, to the Health Department of the city of Chicago, to the local entertainment committee, to the management of the Auditorium Hotel, and to all who have in

any way taken part in this most successful meeting. Motion seconded and carried.

Dr. F. L. Wilmeth then offered an amended resolution in regard to the medical department of the United States army, and moved the adoption of this amended resolution. Motion seconded and carried.

The association then adjourned, to meet in Atlanta, Ga., June 18-21, 1920.

PRESIDENT'S ADDRESS.

Finley Ellingwood, M.D., Chicago, Ill.

In the profession of medicine and surgery, during the past few years, enormous strides have been taken. In the *prevention* of disease, theory upon theory have been evolved, some of which are in part substantiated by sufficient proofs of their truth to justify their application. Many are yet in the process of evolution and some have been discarded.

When our nation entered the world war last year, a remarkable opportunity offered itself for both public and private investigation, to prove or disprove theories in medicine and surgery, and much advance in surgery has been made. But what can we say for *medicine?* In the *prevention* of disease nothing like the splendid results of the past five years have been before attained. But in the study of *medicines* and their adaptations, what has been learned?

If the *profession* had any encouragement before the holocaust of influenza and pneumonia dropped upon us last fall, that *awful visitation* caused these organized dictators to acknowledge their complete inability to cope with it as they should in its deadly progress; and the enormous death rate, which was nearly the equal for a time of the Black Plague of the thirteenth century, has *so influenced the minds of the people against the profession of medicine at large* that it has left the people in *serious doubt,* and has caused them, in enormous numbers, to take up with drugless measures and methods in the cure of disease, because announcement is so generally made, even by the doctors themselves, that *medicine is failing* in its results, and that there is nothing but nature to fix faith upon.

With such terrible visitations in the past, the profession has escaped blame because of the general ignorance—because of the lack of knowledge of both prevention and cure; but to-day, in the light of the advancement of the highest degree of modern civilization, in the advancement, in the marvelous progress made in arts and sciences, in the development of the best of everything, there is no excuse for 80 per cent. of the profession claiming that there are no known remedies or measures that will cure pneumonia and influenza.

In my opinion, this is chargeable, first, to prejudice—the most inexcusable and inexplainable prejudice; and, secondly, to jealousy. There is no doubt that thousands of deaths would have been avoided if the violent, stim-

ulating and depressing methods of the far past had been discarded *outright* at this time by the profession at large, and care and careful dieting, and heat, with no medicine whatever, had been resorted to.

The mortality, which is reported as from 15 to 42 per cent., in my opinion could have been reduced one-half; and if the modern, mild, kindly, but highly efficient, methods of the remaining 15 to 25 per cent. of the doctors, called by the dictators "irregulars," have proven that they can save from 85 to 90 per cent.—what can justify the difference?

As a body of physicians we gather here in this convention to represent that method of practice in medicine which is known as the *Eclectic System in Medicine and Surgery.* If I were to define *Eclecticism in medicine, as practiced* by its many thousands of successful representatives, I would declare it to be "that school of medicine and surgery which includes within its curriculum all of those teachings in this field which are accepted and included by all schools as essential to the prevention and treatment of disease." In addition to this, we include, as the *most essential branch in the total curriculum, basicly important* and *primarily demanded,* a thorough study—the clinical or bedside observation—the most thorough investigation of the *materia medica* as a means to the important end of curing disease, and the adaptation of the individual agents in the *materia medica* and determination of the innate properties of each remedy for this important purpose.

We also believe that in the practice of medicine and of surgery we have the two important, distinct branches of the study in *physic,* as it was once called, and that each physician and each member of the total profession must be as thoroughly qualified in each of these two branches, *if he claims to practice both,* as if they were separate and distinct from the other. No man has any right to call himself a physician and a surgeon if he is only a surgeon, and the mass of the profession are now surgeons. The teaching of *clinical medicine and therapeutics* and of *organic medicine* has but little part in their college course, and in some colleges it has *none.* The full stress of the course is thrown on surgery and laboratory work.

In our study during our past history we have felt that unless we were thoroughly qualified in both we have had no right to call ourselves physicians and surgeons. We believe that it is as *impossible to cure disease* with surgery as it is impossible, with medicine, to correct surgical conditions. It is impossible to be a *physician* without the persistent, accurate, intense study of separate *medical agents,* with which he must combat the various *phases* and the multitude of *manifestations* presented in disease. A diploma from a surgical college does not make a man a good doctor of medicine.

Within the past few years in this study, very much of the study of medicine, as it has been known in the past, has been dropped by the dominant physicians and surgeons until that which is now receiving their attention is comparatively new, has previously been unknown and untried, only as the effort was being made to prove some theory in line with its desired action. In our study we have absolutely refused to drop, especially in time of war and

deadly pestilence, *the old and tried,* however unscientific it may have been, until we have thoroughly informed ourselves as to its inefficiency, or until it has failed, or until we have proved its value or were sure of something from persistent trial that would take its place.

As a first principle in drug study, *we* have *faith,* positive and certain, that nature has prepared, itself, remedies for the cure of disease. It is for us to study the character of these, and to apply them in the lines suggested by their influence, until we have given them a fixed and permanent position, corresponding to the fixed and permanent character of that influence.

In the selection *from all sources* of agents suggested for relief or cure we have paid special attention to the investigation of the individual *plant drugs,* and in the brief century of effort that has been put into the development of our pharmacy we have succeeded in determining the therapeutic activity, and in securing a highly satisfactory knowledge of these drugs, in their most definite, specific and *invariable influence,* each upon its own special, definite condition of disease. The inference can then be at once made that our school is a school of specialists in the study of *materia medica, therapeutics* and *pharmacognosy,* studying these in a *systematic, practical, highly rational* and eminently scientific and successful manner.

The pharmacy of these agents we have developed to a high degree; in the evolution of the *finest class of fluid medicines* known we have developed original, highly scientific and correspondingly excellent pharmaceutical methods and apparatus; and from, and with, these we have evolved a kindly class of medicines, efficient, reliable, rational and highly satisfactory.

During the course of our study, this branch of the curriculum, as studied by the *profession as a whole,* has passed through many stages. It has been subject to sentiment and to varying opinions, until at the present time it is almost impossible to fix for it an exact status among the scientific branches. It has met with almost overwhelming obstacles. It has been loaded, as it were, with barnacles that have weighed down upon it. It has been burdened with theory, and has been retarded in its advancement, as I stated, by *prejudice* of the most intense and unwarrantable character, *out of all accord* with the highly scientific spirit of to-day, until in some colleges it has been but little taught.

The profession at large refuses recognition of our work. It came in before the mechanical method of diagnosis, it superseded the deep intellectual and closely observant method of the old doctors. The modern schools have ceased the teaching of the diagnosis of symptoms, or by symptoms, and their importance, and in this they have dropped much that the mechanical methods of observation do not touch; all this in their efforts to prove their theories, especially that *all* disease results from *specific germs,* and can be cured by destroying the germs.

There is much *truth* in the germ theory, but it is yet so fully in its *infancy,* and the conclusions are so influenced by theory, that we have accepted them only in part, although our *minds are open* to *every* truth they contain.

The field of our study of the plant drugs was not always so exclusively our own field. It was at one time quite thoroughly studied by men whose memories are now revered, as leaders in their time, *in and by the dominant school.* But they themselves did not discard the doctrines that they had proven, as based upon truth. They had, while they lived, the most perfect confidence in them, and in their ability to develop from them a satisfactory future in an exact system of drug application. They wrote broadly and accurately concerning these remedies. There are choice libraries compounded of their writings, which bring to us *truths that are yet truths*; but these books, as far as the dominant school is concerned, *lie covered with dust of many decades upon the shelves,* because, forsooth, young aspiring teachers, *ultra-scientific,* have followed the leadings of theories previously mentioned, undeveloped, and have endeavored to *give standing* to chemical and laboratory products, instead of to the organic and better established agents for which their worthy progenitors spent their lives. But few of these young, aspiring teachers of to-day refer in their teachings to men as far back as Bartholow and Ringer, and especially as far back as Schmiedberg. They have not studied these authors, and know next to nothing of the plant drugs the old writers recommended.

These old men died with *faith* in the truths they had discovered and promulgated, expecting that these truths would be generally accepted. It was not they that discarded them, but, as I have stated, the more recent teachers, who have rejected them for unknown methods and measures.

If Wood and Ringer, Lauder Brunton, Bartholow, Potter or Shoemaker had been obliged to acknowledge such a mortality in pneumonia in their time as has followed the treatment of present authorities, they would have no thought of escaping the responsibility for such a mortality by claiming that there was *no knowledge* of any treatment that would cure, but they would have felt it their duty to continue the research for the truth. They would have considered the medical profession culpable and guilty of a crime so great that human ingenuity could hardly invent a just punishment, especially if it could be shown that by prejudice they had refused, and because of prejudice only, to investigate methods which were claimed to be curative.

I feel that it is the duty of our school of medicine to-day to humanity—the duty of every physician who has knowledge of a successful treatment of pneumonia or of influenza—to declare against the gross errors in the commonly advised methods, and to plainly show to the people that these errors *are errors,* and that the truth lies far and away beyond the methods adopted at the present time by the old school authorities.

In their methods, as I have stated, they are positively at sea. The results of their experiments, often fatal, with serums and antitoxins have been so unsatisfactory as to leave them yet in the darkness. They acknowledge their ignorance of the methods which are claimed to be curative, but they acknowledge *no responsibility for this ignorance.* They still refuse to acknowledge that they are *still* cherishing their century-old prejudices against anything

that does not originate in the old school. They persist in the use of drastic cathartics, unauthorized and deadly stimulation, in the application of ice and the use of morphine or opium (the devil's own measure), notwithstanding they claim—openly—that the results of these remedies are in *every way* unsatisfactory.

There is with me no doubt that 50,000 cases of those who died this past winter died from the development of the disease after the use of morphine. The pathology shown in the development of pneumonia upon the circulation is very similar in all its characteristic symptoms to the development of the poisonous effects of morphine, and this pathology is stimulated and intensified by morphine operating in harmony with the developing pathology often to a fatal degree.

The dictators acknowledge no responsibility for refusing to look into a milder course of treatment, which is pronouncedly successful and which has no objections that could be filed against it except that the physicians who use it refuse to join the American Medical Association.

While many of these high authorities claim that their methods are failures, they claim, as we have stated, that the seriousness of pneumonia and the fatality of influenza are absolutely unavoidable, and that the profession is unable to cope with this malady, as is shown by the results of the past winter.

Is it just to humanity—is it just to the successful members of the profession—in diseases like these, where surgery has but little, if any, place, for the surgeon himself to assume authority, and declare that there is no cure for this disease in medicine? Is it just for these to say that none have any right to claim cures, when they do not investigate these cures? It is my opinion that the mass of the people should throw out a challenge to the surgeons of the profession to show reasons, if the physicians of the other schools can, and do, cure these cases, why they should not use the same measures with the same results. They should demand that it be proven that the 20,000 who *do cure them* with a low mortality are not making false claims.

It is positively unjust that the entire profession be included in the censure —in the blame that is attached to the dictating body for the serious results named. It is unjust beyond all expression to humanity and to the masses of the people, who depend upon the profession for the preservation of their lives and health, that a portion of the profession, unsuccessful in this particular, because they are in the majority, and have the power in their hands to dictate, should claim for the entire profession such a fatality as unavoidable, when there are at least 20,000 physicians in the United States upon whom the dictators in the profession have set their ban, who are successfully curing pneumonia, and who have had, in the past epidemic of influenza, a mortality of not to exceed 5 per cent.

Is it just that the successful man should be classed with those who refuse to look with any degree of confidence upon the methods which cure this disease, and who refuse to try the reasonable course advised by the successful

physicians; who refuse to *lay down their prejudices, even for the saving of human lives* and for the preservation of human health, and still insist that they are the only dictators, that there is no responsibility upon them for refusing to look into other measures, because no one can be right but them? "A king can do no wrong."

On the 11th of December last, there was a meeting in Chicago of the American Public Health Association. There were a number of the leading surgeons of the United States present. The president, in his speech, said: "We are nature's skilled assistants. It requires a good deal of knowledge to know how *little* we know"—a remarkable statement for a learned profession.

This was followed by a remark by another prominent physician that "the profession *has very little power* over pneumonia." He said: "I am convinced that as many patients have been *killed* by *physicians* as have been cured. I did my share of the killing by giving whiskey, strychnine, etc., when, if the patients had been let alone, they would have recovered."

Another physician added, to the entertainment of the occasion, that he believed a good definition to the art of medicine was "the art of entertaining patients, while nature effects a cure."

Four or five years ago, another surgeon, president or ex-president of various medical societies, including, I think, the American Medical Association, made the statement at a session of the Chicago society to the effect that there was no known medicine that would have any effect on pneumonia.

There came to my personal knowledge, a few weeks later, a case of a mother of three little children, who brooded from the moment she read *that* statement from the newspaper over the fact that she might contract pneumonia and die and leave her children, because the great surgeon had said there was no medicine for its cure. A physician was called a few days later to prescribe for her because she had a bad cold. He carelessly declared it to be pneumonia. There came over her a change almost as if a bullet had pierced her heart. She was stunned. She uttered no word. She then in silence made provision at once, as much as possible, for her children, gave herself up to the inevitable, as the "learned" and discreet surgeon had made it, was taken to the hospital, and died of pneumonia within twenty-four hours.

If the representatives of the great profession of medicine in our country to-day actually *know no more medicine* than they *honestly acknowledge in the above,* is it not time that the people at large *accepted their statements as truth?* Is it not time for those who do know the truth that they declare their knowledge? Are we laggards? Are we slackers? Are we *true* to humanity, to those who need our help?

In what particular is the acknowledgment of a crime before the court of justice any different, or any more worthy of punishment, than the acknowledgment, with a smile on his face, of a popular practicing physician that one-half of his pneumonia patients he has killed by the medicines he has given?

If the regulars do not care to accept the truths we have proven, why do they not brush the dust of decades from the covers of the writings of their worthy antecedents whom we have mentioned, and apply the truths they taught? They could then reduce their mortality in these diseases most materially.

Bartholow, in the early seventies, and Wood, immediately following him, advised in the successful treatment of pneumonia the use, first, of aconite, which, as Potter said then, *"Is now the very best of all fever medicines."* Then veratrum, gelsemium, digitalis, belladonna and ergot, each in its own place, and each according to its then rapidly accumulating reputation for specific action upon specific, clearly outlined conditions present, as such, in the total disease.

Back in the days of the above writers, pneumonia was counted as a serious disease; but it was considered an announcement to be withheld, a thing to be ashamed of, if the mortality reached above 25 per cent. During the past winter, statistics from all authorities placed pneumonia as *first* in its fatality, varying in reports from 28 to 50 per cent. of the cases. In many cases the mortality throughout the army, in general and local hospitals, and private practice, ran from 30 to 45 per cent., and in one case to 52 per cent. These results are certainly enough to make the old reliable observers of the sixties and the seventies turn over in their graves.

There are highly successful and satisfactory methods of treating pneumonia, and there are more than one successful method. There are doctors in this room that can treat it and cure it by at least three or four different methods—which in private practice reduces this disease to a very low mortality, and in hospitals and other outside practice will reduce the published mortality more than one-half, readily consists of a very simple course. This will be presented to this body by the symposium from the best authorities in the Eclectic school, which will constitute an important part of our program, immediately following. To this presentation I will leave the discussion of the agents and measures that we advise, and which secures for us our very low fatality.

If the authorities of the dominant school are not willing to accept the measures laid down by our experienced men, we suggest to them that they go back to the old books and apply the suggestions made by the authorities we have previously referred to, if they have not previously studied these methods. If they desire to improve the conditions, they will find that they have relegated to oblivion some very excellent, some very useful, measures, and in their place they have gone backward, and are advocating measures which are immediately productive of serious results, and which leave them very far from occupying the position even that these old authorities occupied. In this they have certainly gone toward the methods a century old, that ended the life of George Washington, in the primary acutely congestive stage of pneumonia, by bleeding him to death.

To those who are not familiar with our methods, but are anxious to find

something curative, even if they must depend in part upon that which is irregular, I would advise the study of *those medicines* which our writers have accurately adjusted to the treatment of some exact pathological condition involved in the total symptom complex of these important diseases.

I would urge persistent bedside observation in line with the exact indications of each remedy. If they want literature on the plant drugs, the Eclectic and Homeopathic libraries are very full and sufficient to those who have been reading nothing but that of the regular school. I appeal to you—I want to urge you—*for the sake of humanity,* go back and read *up on* these remedies, and plant your faith in their action; then apply the remedies according to the specific indications you find, and be *convinced* by the results of your own observations.

Help to re-establish faith in drug action. Help to encourage the study of these important drugs. All this can be done without interfering with the progress of preventive medicine, and let your work be added to that of the observers of the past as most important indeed.

SOME ASPECTS OF ECLECTICISM AS THEY APPEAR TO A PHARMACIST.

J. H. Beal, Sc.D., Pharm D., Urbana, Ill.

It affords me great pleasure to bring to this gathering of representatives of the art of medicine the greetings of the sister art of pharmacy.

There are no lines of doctrinal division in pharmacy. It acknowledges an equal duty to all branches of medical practice. It recognizes an obligation to produce with equal impartiality and equal fidelity the synthetics, biologics and energetic mineral remedies favored by the elder branch of medicine, the liquid and solid educts and products of plant drugs that have been developed and employed with such distinguished success by the Eclectics, and the high attenuations and triturations characteristic of Homeopathic practice.

Though in these latter days the distributor of medicinal products has been driven by sharp commercial necessity to add many non-medicinal lines to his stock in trade, the true art of pharmacy still survives, and has developed a technique that is able to supply therapeutic agents of such definiteness of quality and potency as could not have been anticipated a few decades ago. The man who produces these agents in form for medicinal use is a pharmacist, no matter by what secular title he may be called, and regardless of whether he works alone in the back room of a small shop or directs the activities of a laboratory employing hundreds of assistants in special lines of work.

According to conventional theory, it is the specific function of the physician to select and direct the use of remedial agents, and the specific function of the pharmacist to prepare and dispense them. These two functions so distinct in theory have never been sharply distinguished in practice, and probably never will be. Between the two there is a zone of action common

to both, and it is in determining the limits of this field of common action that the representatives of our respective arts find most frequent cause for disagreement. In the adjustment of these and of all other controversies there can be no better guide than the recommendation of St. Augustine of Hippo: "In the things which are necessary, let there be unity; in those not absolutely certain, let there be liberty, and in them all, let there be charity."

The Revolt Against Medievalism in Medical Practice.—Only those whose curiosity may lead them into such literary byways as the proceedings of early medical societies or old medical journals and pamphlets, will be likely to appreciate the conditions prevailing in medical practice of the period when the American states, newly emancipated from European political control, were still under the domination of medievalism in medicine.

To the people of that period the reform of medical practice was a topic of popular interest analogous to the prohibition agitation of our time, when champions of every profession and every degree contended in speech and pamphlet concerning the sins of omission and commission of the medical profession.

Out of the confusion of charges and countercharges of this early crusade one great and significant fact appears: that the prevailing medical practice of the period was a system of bigoted adherence to ancient theory, of blindness to manifest facts, and of cruelty to suffering humanity such as at present can scarcely be imagined. In spite of frightful mortality, patients were blistered, bled and drugged with mercury and antimony to an extent that would seem incredible were not the recorded facts beyond dispute.

The ancient theory that disease was demoniacal possession had long been abandoned, but disease was still regarded as a separate entity to be overcome and ejected from the human tenement by powerful antagonists, and hence it was conceived necessary to employ medicines and measures of sufficient potency to execute the ejectment. That the tenement should be frequently wrecked in the process was, of course, a natural consequence.

The men who wrought thus like red Indians or like agents of the Spanish Inquisition were kindly men, most earnestly desirous of easing suffering and saving life. If they caused much needless pain, it was because they had been taught that they must be cruel in order to be kind, and they tortured their patients in the sublime faith that they were doing all that was humanly possible to save them. The story of orthodox medicine of the period is the story of a profession in the grip of an archaic creed, an illustration of how men of normal intelligence, under the domination of a doctrine they are taught to regard as infallible, may look squarely at facts without seeing them, or may see straight things crooked and crooked things straight. It was a phenomenon peculiar to no race or age, but an example of what inevitably results when men surrender themselves to the direction of dogmatic authority.

Not all the practitioners of those early days adhered to the rule of authority. There were those within the fold who saw clearly the faults of

the orthodox practice, but they either concealed their opinions, or, if they uttered them aloud, received the treatment accorded to William Harvey some two centuries later, who complained that, "Should any, by a more sedulous observation, pretend to make the least step toward the discovery of any such remedies, their hatred and envy [*i. e.*, of the medical faculty] would swell against him as a legion of devils against virtue. The whole society will dart their malice against him with all the calumnies imaginable, without sticking at anything that would destroy him root and branch. He who professes to be a reformer of the art of physic must resolve to run the hazard of the martyrdom of his reputation, life and estate." *

The Conflict Between Authority and Innovation.—Established institutions have a great advantage in defense in the mere fact of being established. Said Lord Chancellor Thurlow to a deputation of non-conforming English clergymen who asked for some relaxation of the law in their favor: "Gentlemen, I am an upholder of the Established Church, not that I care at all for the Established Church; but I uphold it because it is the Established Church. Get your damned sect established in its place, and then I will uphold that."

In the conflict for medical reform the existing practice enjoyed the prestige of established authority; its practitioners, saturated with the old learning, were in control of medical education, and filled the eligible positions in government service. All the traditions of the craft were in their favor, all the respectability was theirs, together with all the fine phrases and catch words with which entrenched authority and ancient respectability are wont to defend themselves.

With much satisfaction they adopted the dignified title of *rational*, to designate their own methods and procedures, while the innovators and dissenters were denominated *empirics*, and their practice as *empiricism*.

The word "rational" has a fine sound to the medical ear. The term suggests the employment of the higher resources of the human reason, scientific explanations and other exalted intellectual exercises. Examined in the light of medical history, however, the term has most commonly been applied to things we would now regard as quite the reverse of reasonable, and quite contrary to the sense of the dictionary definition.

Interpreted according to medical history, rational therapeutics, if it means anything, means the application of remedial measures in accordance with the prevailing theories of therapeutics and practice; in other words, therapeutics according to theory. Consequently, what is rational to one generation is quite likely to be irrational to the next.

Written out in full, the story of rationalism in medicine is the story of dogmatism in medicine. It has always appealed to that quality of the human mind which prompts it to prefer a dogmatic explanation of a mystery to a mystery unexplained, and to accept as explanation whatever is delivered in the name of authority and frequently repeated.

If by empiricism is meant the use of remedies without the exercise of

* Wilder: History of Medicine, p. 443.

reason or judgment, the term is justly one of reproach; but if it means the defiance of artificial standards and preconceived theories of therapeutics, and the selection of remedies solely upon the grounds of their merit as proved by experience, the title should be regarded as one of honorable distinction.

Measured by practical results, has not so-called empiricism vastly more to its credit than what has commonly passed for rationalism? Has not the one given us practically every valuable agent in our materia medica and practically every valuable method known to modern therapeutics; and has not the other given us almost nothing but a series of hideous errors?

No part of medical practice was ever more rational in the sense of being in accordance with medical theory, or better fortified by the medical reasoning of its day, than the old practice of depletion or blood letting, and no practice was ever more deadly.

Theories in medincine are valuable in proportion as they serve to display observed facts according to their natural relations and in proper co-ordination; they are obstructive in proportion as they tend to substitute conjecture or the dicta of authority for the facts themselves.

Owing to imperfections of observation, most of the things set down as facts contain a certain proportion of adherent extraneous matter derived from conjecture. Every logical system or "theory" contains a liberal admixture of these conjectures; and the more elaborate the theory, the greater will be the sum of the partial errors, and the final conclusion will be a compound and multiple of all.

"The most exquisite folly is made of wisdom spun too fine."

Theoretical considerations may suggest the use of a therapeutic measure, or aid in the interpretation of its mode of action; but the extent of its value or lack of value in a given pathological complex is a question of fact that can be determined only by observation; in other words, empirically. If observation confirms the theory, so much the better for theory; but in all the world there is no reason for the use of a remedy equal to the observed fact that it has proved serviceable in other like pathological complexes.

The theory or practice most rational in the true sense is that which keeps in closest touch with empirical fact from its first premise to its last conclusion.

The Beginnings of Modern Eclecticism.—The earlier stages of the reform movement consisted mainly of a general and unorganized protest against dogmatic medicine. As the movement gained in volume the individuals began to segregate into special groups around the more aggressive leaders, many of whom were laymen, some of them professing extravagant theories of disease and medication. Each of these groups had a special pathy or ism of its own, but the groups had little in common among themselves except their opposition to the drastic and dangerous system of medication which they severally aimed to replace, and their general employment of botanic drugs of American origin.

But not all of those who practiced in defiance of the code were unlettered.

Some of them were physicians thoroughly trained in the sciences and doctrines of the old school, men of unusual capacity and unusual learning, but of sufficient independence of thought and judgment to reject the dogmas of authority when these were contradicted by facts.

These defections from the old practice gradually increased until a sufficient number of men of medical training and natural capacity became identified with the new movement to impart to it some degree of system and orderliness. Under this more intelligent leadership there was a gradual drawing together of the separate groups of reformers, a gradual elimination of extravagant and fanciful doctrines, and early in the beginning of the last century the reform began to assume definite shape and character.

This very progress towards system and order was the cause of increasing bitter attacks upon the new movement by those who were wedded to the old doctrines. Verbal polemics were supplemented by acts of legislature. The new practice was made illegal in a number of states, and prosecutions for violations of the law were of common occurrence. One who lived through the days of proscription says: "Collect all of the facts you may; and still you will be unable to give but a tithe of the malicious prosecution, and in some cases the imprisonment, these early pioneers had to suffer in consequence of their faith and practice."

The men of the new school did not take their punishment lying down. They realized that they were crusaders, and they fought like crusaders. In pamphlet and verbal encounter they generally gave as good as they received, and more.

As a practical measure they appealed to the people, and went to the legislatures with petitions bearing, in some instances, 30,000 to 40,000 signatures --evidence of remarkable popular interest for those days—demanding the repeal of the objectionable laws. Such activities were quickly effective, and the so-called irregulars, who by this time had definitely assumed the title of Eclectic, were admitted to practice on a legal parity with the graduates of other schools.

Entrenched error dies hard, however. The old practice, though it had under pressure modified many of the early abuses, still claimed practical infallibility. Even as late as 1845, one of its chosen spokesmen publicly declared that "medical science does not need, nor is it susceptible of, further improvement or reform." That this was a fairly representative opinion is attested by the statement of a contemporary historian that "it was required of every individual about to graduate at the principal medical colleges, as the condition of receiving the degree of Doctor of Medicine, that he should swear to adhere to the old procedure, or forfeit his diploma."

The Great Leaders of Eclecticism.—Closely identified with the work which gave modern Eclecticism its fundamentals of form and shape, and confirmed its characteristics as a system of practice, there came a group of leaders, teachers and organizers who would have been remarkable in any company.

First among those responsible for the concentration of the scattered currents of reform into the main channel of Eclecticism should be named Wooster Beach. Learned in the doctrines of the old school, an untiring investigator, possessing the zeal of the reformer with the constructive and conservative judgment that harmonizes opinions the same in principle but differing in detail, recognized by honorary membership in European medical societies, and the recipient of decorations from foreign potentates, he well deserves the title of founder of Eclecticism.

With the name of Beach should be written that of Thomas Vaughan Morrow, well trained in the orthodox medical institutions of his day, but an early convert to the new practice, a pioneer in Eclectic education in the West, a teacher of rare ability, and whose studies of diseases and treatment collected and published by his friend and associate, Dr. Ichabod Gibson Jones, long constituted one of the authoritative treatises upon Eclectic practice.

Others associated with pioneer work were the talented, eloquent, and perhaps erratic, Joseph Rhodes Buchanan; Robert Safford Newton, teacher, organizer and distinguished author and editor of medical and surgical works; Zoheth Freeman, capable anatomist and successful surgeon; Daniel Vaughn, the diffident recluse, one of the most profound scholars and scientists of his day; John King, the grand old man of Eclecticism, scientist, linguist and ripened scholar, excelling in the sound and substantial virtues of the good citizen and the good physician, and author of the "American Dispensatory"; William Byrd Powell, the brilliant student of cerebral physiology and craniology, some of whose observations, once denounced as fanciful, have been confirmed by modern investigation; John Milton Scudder, all around physician, author and teacher, who gathered up the scattered threads of Eclectic therapeutics and elaborated them into the doctrine of specific medication and specific diagnosis; Andrew Jackson Howe, whose anatomical information gained by an unusual range of animal dissections gives him an important position in the list of contributors to the science of comparative anatomy, and whose boldness, skill and success as an operator placed him in the first rank of American surgeons of his day.

These are but a few names selected from a distinguished company. Probably one better acquainted with the significant facts of Eclectic history would make a different selection of typical pioneer workers; but doubtless all will agree that these were men whose intellectual abilities, profound scholarship and medical attainments would have qualified them as worthy associates of the medical profession of any country.

Though the aim has been to speak principally of those whose labors have ended, it is gratifying to know that the leaders and teachers such as Finley Ellingwood, Harvey Wickes Felter, Herbert Tracy Webster, W. N. Mundy, R. L. Thomas, and their co-workers, are living evidence that the era of progressive and constructive Eclecticism has not yet passed.

The Material Achievements of American Eclecticism.—The name "Eclectic," as signifying the selection of the best from every source, might be

claimed with propriety by a member of any school, since the conscientious physician will always select the remedies and measures which seem best to him for the treatment of his patients. The special significance of the term as the designation of a system or practice is in the methods of selection employed, and in the criteria by which the quality of the selected agencies are determined. It is in these methods and criteria that modern Eclecticism finds its distinguishing characteristics.

Much of what was once regarded as distinctively Eclectic has come to be regarded as the common property of the profession at large, though its Eclectic source is rarely mentioned. In this quiet appropriation of Eclectic material we see illustrated the observation of the medical historian that "the conservatism of established bodies of men is so great as to induce resistance, even to ferocious violence, to changes deserving of a welcome. New views are generally first denounced as false, afterwards derided as of little importance, and eventually accepted with the assertion that they had always been the property of the profession."

If the reformers labored for the aggrandizement either of self or of a system, they might well claim special compensation for the appropriation of their material; if they labored simply for the general good, they are sufficiently rewarded by witnessing the triumph of practically all of their cardinal doctrines.

Limits of time and space prohibit an extended review of the movement of which the head and front of leadership was Eclectic, or later became Eclectic, but among the results the following stand sharply forth:

Antagonism to Blood Letting.—It was reform leadership that was largely, if not mainly, responsible for the decline and almost complete disappearance of venesection, or blood letting, once an almost universal procedure.

"Bleed the patient until he is white" was an injunction most zealously believed in and followed both in Europe and America. Even as late as 1841 a prominent American exponent of the old practice declared that five-sixths of the blood was superfluous, and, being loaded with the seeds of disease, every treatment should be initiated by a routine reduction in the volume of this supposedly noxious fluid. Patients were bled for everything alike—for yellow fever, for pregnancy, for consumption, and even for broken bones and Asiatic cholera.

If a physician of the present day should practice such depletion upon a patient as was inflicted upon George Washington in his last illness, and which, with the accompanying treatment, undoubtedly hastened the death of that illustrious American, he would almost certainly be convicted of manslaughter by a jury of his peers, if, indeed, the indignation of the community did not inflict more summary justice.

Objection to Excessive Use of Mercurials.—A second principal point of attack upon the old practice was its excessive use of mercurials. These were administered as a part of routine treatment, often pushed to the point of complete physiological reaction, the baleful results of which were appall-

ing. In the early part of the last century doses of 15 to 30 grains of calomel were common; doses of 60 to 100 grains, and more in 24 hours, were not uncommon. Those whose memories reach back to Civil War days will recall that every community then had its quota of horrible examples of mercurial medication.

While the condemnation of mercurials by the earlier reformers was absolute, this extreme position was not strictly adhered to by all reform practitioners, many of whom have held that mercury has a proper sphere of usefulness, but have advocated its use with great precautions to avoid mercurialism. If the writer's information is not at fault, it was one of the fathers of Eclecticism who was among the first to advocate the use of calomel in one-tenth grain doses, repeated half-hourly, as the means of obtaining the full results of that agent without its attendant dangers.

Opposition to Opiates.—A third point of reform attack was upon the excessive use of opium, then one of the standbys of the commonly accepted practice. When one reflects upon the blistering, bleeding and drastic purging of early days, it is easy to understand why the anodyne effects of this drug were so highly prized. To the use of opium, except under extraordinary conditions and with extraordinary precautions against habit formation, the concensus of Eclectic opinion has always been opposed. In later days, cocoa and cocaine have been included in the same category.

Though prejudice may have played some part in the opposition to opiates, it was surely a fortunate prejudice, that has largely spared Eclectic physicians from responsibility for the misuse of a drug which in the extent of its ravages is second only to alcohol, far more deadly in its effects than that agent, and which still more rarely lets its victims escape.

It may be worth while to note that our modern anti-narcotic legislation may be regarded as a continuation of the old Eclectic war against opiates, with this difference; that the Eclectics contended against their professional employment, whereas the efforts of the modern legislator seem to be directed mainly toward depriving habitues of the solace of their drug, but without closing the door to the creation of new victims.

Eclectic Predilection for Kindly Medication.—Not less antagonistic was Eclectic leadership to cantharidal and tartar-emetic blistering, often to the extent of suppuration, and to drastic purgation to the limit—and sometimes beyond the limit—of mortal endurance. It was antagonism to these and to other harsh procedures of the older practice that developed in the reformers a fondness for the expressive phrases, "kindly medication" and "kindly treatment," of such constant iteration in Eclectic literature. Translated, the phrases meant that, instead of the exploded idea of expelling disease by violent measures, the natural curative processes of the organism should be invoked and supplemented, or directed into normal channels by non-injurious medication.

Development of American Materia Medica.—But Eclecticism has been constructive as well as destructive. If it has subtracted some things from the old materia medica, it has added more things of value to the new. No

other school of medicine has approached it in the extent of the study expended upon our native drugs, either as to the number of species examined or the extent of examination. It is not too much to say that the Eclectics have enriched the materia medica of the world with some of its most valuable plant drugs, either by being the first introducers of them or by first giving them prominence as therapeutic agents.

The proportion of plant drugs of American origin in common use is truly remarkable, when we remember that the drugs of the old world were under observation many centuries before this continent was discovered; and these American drugs are almost as great favorites with European physicians and with the compilers of European pharmacopeias as they are with us.

Simplicity in Prescribing and Specific Medication.—Another principle which, though not very evident in the early phases of Eclecticism, at a later date became one of its significant features, is that of simplicity of prescribing. Although a wide range of therapeutic agents have been employed, the remedies have generally been employed singly or in comparatively simple combinations, and with definite ideas as to the purpose and effect of each component.

Though the use of single remedies has always been characteristic of Homeopathic practice, Eclectic leadership has been largely influential in the growth of this practice in the general field of medicine.

Simplicity in prescribing is really one of the consequences, or, rather, a detail, of a still more important and distinctive feature of modern Eclecticism; namely, that disease should not be treated by routine methods, according to disease names, but that the treatment should be specifically adapted to the particular symptom-complex under observation, a doctrine more completely elaborated and systematized by Scudder in his treatises on specific medication and specific diagnosis. This principle of medication, under one designation or another, is now generally accepted by the profession at large.

To such an extent have distinctive Eclectic principles been accepted by the medical profession as a whole that it is a question whether the physicians of other schools who habitually employ Eclectic specific remedies in accordance with Eclectic indications* do not in the aggregate outnumber those who acknowledge Eclectic affiliation.

It would be unfair and disingenuous not to mention that there were many individual physicians of the earlier school who exclaimed against the excesses of blood letting, blistering, drastic purging, mercurialization and opium drugging. These are entitled to credit to the extent they contributed to the work of reform; but it must not be forgotten that it was the leaders and members of the Eclectic school of medicine who made these things the cardinal points of their system of practice; that it was for these articles of their faith that they suffered contumely and abuse, and endured the name of irregulars and more opprobrious epithets. Now that the once derided doc-

*The theory of specific medication and use of medicines by the Homeopathic school is, of course, based on different reasoning.

trines have become a part of the faith of all schools of medicine, just credit cannot in decency be denied to the crusaders who formed the head and front of the attack upon the old abuses, and who suffered professional martyrdom for their faith.

The Contributions of Eclectic Pharmacy.—Eclectic pharmacy, or, rather, pharmacy applied to the development of the Eclectic materia medica, though not separated by lines of doctrinal division from pharmacy in general, and though having a less tempestuous and less controversial history than the Eclectic practice of medicine, has had its share of troubles and has recorded its share of honors.

When Eclectic pharmacists began their study of the American materia medica, the available preparations of our indigenous drugs were limited to a few unsatisfactory classes, most of which were unsightly in appearance, bulky in dosage, nauseous in taste, of indefinite quality and strength, and uncertain in action. It was largely due to these workers that we have been provided with the concentrations and definite preparations of American plant drugs that have now, and seem destined to retain, a high place in the confidence of the medical profession, without regard to school affiliations.

Prominent as a pioneer in Eclectic pharmacy must be written the name of William Stanly Merrell, as one to whom we are indebted for some of the earlier successful explorations in the field of plant concentrations, and whose work has been so acceptably carried on by his successors of the same family and name.

Though this brief account is intended to deal mainly with the past, it would be seriously incomplete if it failed at least to mention one whose work bridges the old with the new in Eclectic medication, the wizard of American plant pharmacy and chemistry, John Uri Lloyd, who has enriched with new knowledge every field he has entered, and whose investigations of the colloidal conditions of plant drug constituents have opened up a new world for pharmaceutical exploration.

The Tendency Towards Therapeutic Nihilism.—The Eclectic school came into existence as a protest against excessive and drastic medication. It is not improbable that it may yet be called upon to defend the reasonable and conservative use of medicines against therapeutic nihilism.

In explaining why materia medica has been dropped from the medical curriculum, an instructor in a university medical department recently made the statement that the primary object of modern medical education is to teach the student how to diagnose disease, not to cure it. From time to time other exponents of so-called higher medical education have expressed themselves in language that would warrant the opinion that the primary function of the modern physician is to distinguish and classify pathological conditions, and that, compared to this, the curing of the patient is a rather minor and secondary consideration.

In a lay periodical of large circulation there recently appeared an article by a prominent medical officer of the United States army, from which the following passages are abstracted:

"Medicine has gone out of style. Nothing is more significant in the treatment of disease.

"The modern doctor has lost his old time faith in drugs, for the simple reason that they do not always do what is claimed for them.

"Indeed, it was only a few years ago that salvarsan was invented, the first drug that absolutely cured a specific disease, and did nothing else.

"After six hundred and five experimental trials in the laboratory, the right combination was found.

"That is the only sort of medicine the modern physician will have complete faith in as a 'cure.' And the number of such is one!

"This does not include the serums and antitoxins, which have been discovered in the same scientific way and work miraculously for cure."

If the author of the statements quoted intended merely to condemn promiscuous drugging, carried on for no other reason than to be "giving something," he is approaching ground long ago occupied by all thoughtful physicians; but if he intends the implication that 606 and a few serums and vaccines are the only agents that can be relied upon to favorably modify disease processes, then the majority of thoughtful physicians will vigorously dissent from his conclusions.

Between the extremes of overdrugging and of therapeutic nihilism there is the wide province of reasonable and conservative drug therapy. The true physician knows from such experience that there are numerous drugs that have the power to favorably influence pathological conditions, when selected and administered according to the indications; and when his treatment does not succeed, where recovery could reasonably be expected, he attributes it to his failure to make a proper selection of remedies rather than to the poverty of his materia medica.

As a rule, Eclectic medical colleges have placed special emphasis upon their courses of materia medica and drug therapy, and have excelled in the minuteness and thoroughness of the study of drug indications in pathological derangements they have demanded of their graduates. If patience and painstaking clinical observation can be relied upon as a safe guide to treatment, no one should be better qualified to pronounce upon the value or deficiencies of drug therapy than the experienced Eclectic practitioner.

But we are told nowadays that clinical observation as a guide to medication is quite out of date, and that the proper method of determining the value of a drug in the treatment of the sick human is by observing its reaction upon a healthy animal in the laboratory.

If it be true that the determination of therapeutic efficiency is to be transferred from the sick room to the laboratory, no one can be more deeply interested in the transfer, or better entitled to be consulted as to the sufficiency of the proposed new methods of valuation, than the pharmacist whose products will be called upon to meet the new conditions.

The working pharmacist knows something of the possibilities of laboratory experimentation and something of its limitations. He has learned through sore experience the difference between theory and practice, and the rarity with which the conclusions of so-called technical experts can be

applied to actual working conditions without extensive modification and adjustment.

Limitations of Laboratory Methods of Determining Drug Action.—The hypothesis that animal experimentation is a safe and sufficient guide to human therapy requires an assumption of parallelism in drug action upon man and the lower animals that is not only contrary to natural reason, but is contradicted by the evidence of the laboratory itself.

With such a drug as atropine, for example, the dosage which would produce a perceptible physiological effect upon the human may need to be increased some hundreds of times in proportion to the body weight in order to produce a corresponding reaction upon the animal selected for comparison. Conversely, the reaction of the test animal to certain other drugs may be immensely more delicate than the human.

Pharmacodynamics, or pharmacology, is too new a science to warrant extensive generalizations, but it has progressed far enough to teach that the similarity or dissimilarity of the action of a drug upon one of the lower animals and the human is a question of fact, that must be separately determined for each particular drug and for each particular species of test animal.

In other words, if we would know the physiologic action of a given drug upon one of the lower animals, we must observe its action upon that animal; and if we would know its physiologic action upon the human, we must observe its action upon the human. The one cannot, with any degree of certainty, be deduced from the other.

As a means of determining therapeutic usefulness in human medicine, animal experimentation is still more uncertain. Here the laboratory method fails, not only by the extent of the difference between the physiology of the test animal and the physiology of the human, but by all of the distance that lies between the region of physiology and the region of pathology. The sacrifice of hecatombs of healthy laboratory animals, no matter what else it may teach, can not tell us the specific effect of a drug upon a particular symptom-complex found in a human patient.

The feeding of rice hulls to a healthy pigeon can give no indication of the value of the so-called vitamins in the deficiency diseases, nor will the administration of quinine or emetine to a healthy guinea pig furnish any indication of their respective values in the treatment of malaria and of dysentery in the human.

Moreover, if the human be adopted as the test animal, in only a limited number of cases will the drug effects upon the normal subject throw light upon the effects of the same drug on the sick human. One is the reaction of a normal mechanism; the other, the reaction of an abnormal mechanism. It is not reasonable to expect the application of a given impulse to cause the same reaction in a defective mechanism that it does in a normal mechanism, whether the latter be a tissue complex or one of metal, and clinical observation confirms this reasoning. An antipyretic may lower the temperature of a fever patient four or five degrees, but it will not cause a corresponding

reduction in the normal temperature of the same individual in a state of health.

When disease is due to a specific organism within the human body, proof that a given agent will destroy or inhibit the growth of the same organism when isolated or when found in the laboratory animal is suggestive of its possible value for therapeutic application. Likewise, when a given clinical picture found in the human can be exactly reproduced in the test animal, the administration of a given drug to the latter may be suggestive as to the drug effects upon the clinical picture in the human. In both cases, however, the laboratory evidence is suggestive merely, not conclusive; and not until the drug has been proved by actual clinical use can it be accepted as a reliable therapeutic agent.

The etiology of many pathological conditions is so utterly obscure, and their development and progress so much beyond our present understanding, that we cannot reproduce their clinical equivalents in the animal subjects of the laboratory. Here clinical observation, and that alone, must guide the steps of the therapeutist.

As an illustration of the relative values of clinical experience and laboratory endorsement, consider the history of the multitude of the synthetic patent medicines,* or so-called coal-tar derivatives, introduced to the medical profession during the past twenty-five years. How many of these were proclaimed with a great flourish of scientific and professional trumpets, fully endorsed by laboratory authority, and fortified by elaborate tables of the recorded results of laboratory experimentation! And how many of them are already forgotten!

They did not stand the test of clinical experience. When administered to the human patient, they either failed to produce the favorable result predicted from the laboratory test, or they produced some unfavorable or untoward reaction that condemned their usefulness. We willingly grant the supremacy of the clinical test in these cases, and would seriously question the sanity of the physician who would continue the use of clinically condemned products simply because of their laboratory approval.

The Physiologically Inactive Drugs.—One of the places in which laboratory authority has been invoked to condemn clinical observation is in the use of drugs which do not exhibit marked physiological or poisonous qualities when administered to the lower animals.

The doctrine that toxicity is an index of medicinal value, or that a medicine is simply a poison in small doses, and, consequently, that an agent without poisonous quality must necessarily be devoid of medicinal activity, is a dogma the essence of which traces back to Basil Valentine, or beyond. It is one of the last remaining vestiges of the old devil doctrine of disease which implied the use of powerful antagonistic drugs for disease expulsion.

It is true that many recognized medical agents are toxic in overdoses;

*The term "patent medicine" is not used in a derogatory sense. A medicine is neither more nor less efficient because protected by patent or otherwise.

but this no more warrants the deduction that all medicine must be toxic than the observation that some common food stuffs contain poison warrants the deduction that all food stuffs must exhibit poisonous qualities.

Those who insist upon this dogmatic tying together of toxicity and therapeutic efficiency must surely overlook the so-called vitamins, so clinically potent, yet seemingly inert when administered to the healthy normal test animal.

They must likewise have overlooked the historic dispute regarding the activity of erythroxylon coca. Here the issue was squarely joined between the clinical observers on the one side and the laboratory biologists and physiologists on the other. The clinicians insisted that properly prepared preparations of coca were active under clinical conditions; the laboratory biologists and physiologists asserted the contrary. The biologists tried cocaine on frogs, mice and rabbits, and proved to their satisfaction that its effects were comparable to those of thein and theobromine. The physiologists, after elaborate precautions to procure pharmaceutically perfect preparations, followed by detailed experiments under supervision of the most expert laboratory workers available, brought in a report showing that in heroic doses coca preparations were about as active as weak tea, and that the same reactions could be produced by equal doses of milk and water, or even of pure water, and categorically declaring that coca had "an action so slight as to preclude the idea of its having any value, either therapeutically or popular."

The clinicians, of course, were duly abashed by this highly scientific condemnation of their observations, and even so astute an observer as Edwin R. Squibb, the leading pharmaceutical manufacturer of his day, deleted coca preparations from his list on the strength of this scientific pronouncement.

We know now that clinical observation was correct, and that the laboratory experts were mistaken. If cocaine and coca preparations have declined in therapeutic favor, it is because of their pernicious activity, not because of their inertness.

These and numerous other considerations justify the conclusion that the clinical usefulness of a given drug is a question of fact, that can be finally determined only by clinical observation, regardless of what the laboratory expert may say.

Not even the most ardent adherent of laboratory methods would question the ability of the physician to detect harmful results following the administration of a given drug to a patient. Why, then, question his ability to observe beneficial results following the administration of other drugs? Is it not a singular perversion of logic that would concede the ability of the physician to declare useless what the laboratory has found to be valuable, but would deny his ability to declare useful what the laboratory has found to be valueless?

We cannot play fast and loose with clinical evidence in this manner. If we impeach the clinician's judgment on the one side, we impeach it on the other: we cannot divide the ability to approve from the ability to disapprove.

One weakness of the laboratory test of therapeutic value is that it tends to exalt the artificial imitation of conditions above the real conditions of actual use, whereas it is through actual use that the test itself must be tested.

If the experienced clinician could stand by the laboratory table, he would frequently be able to detect nothing more substantial than flickering shadows of suggestion in experiments which the enthusiastic biologist is willing to accept as sufficient justification for sweeping general conclusions.

After all, what higher or finer laboratory test of therapeutic efficiency can be conceived than the administration of a remedy by the skilled therapeutist and a careful and discriminating observation of the results? If the results in one case agree with the results observed in dozens of other similar clinical pictures, and if the experience of one therapeutist is confirmed by the experience of hundreds of other therapeutists, why is this not as much an experimental demonstration as any of the biological laboratory?

If the clinician is incompetent to interpret drug effects upon patients in the sick room, what mysterious quality of the laboratory atmosphere is it that will enable him or another to accurately interpret drug effects upon the guinea pig?

For the medical attendant to resign his right to pass upon the therapeutic effects of the remedies he administers to his patients is to surrender the supreme thing that justifies his title of physician. When he is ready to make this surrender, he should be fair with himself and with his patients, and resign the remainder of his high prerogatives as well.

The writer does not wish to be understood as denying biological or physiological experimentation in general. Such is not his intention. In its proper place, laboratory experimentation on drugs is invaluable. It has already taught us much, and undoubtedly will teach us much more.

It is not what the laboratory may really teach that is to be feared, but premature theorizing from the results of a science that is still in its infancy, the followers of which are not yet able to agree among themselves as to the meaning of their own experiments, and the conclusions of which, up to the present time, have been more frequently condemned than confirmed when submitted to the conditions of actual practice.

RESPONSE.

PROFESSOR LLOYD, PHARM. M.

My dear Professor Beal:

A weary way is the walk of life to those who, in behalf of a good cause, strive to serve their fellows. To be continuously misunderstood, misrepresented, even abused and ostracised where encouragement and a helping hand should be extended, tends to breed a hostile spirit even in the idealist, unless he be so strong and so indifferent to self that personalities do not count and passion can, in his heart, find no abiding place. When these prevail,

the intellect's higher ambitions are smothered by crops of tares and thistles and other kindred weeds; lost are the strong man's opportunities for service; the altruistic hopes of the feeble are smothered in viciousness and hatred.

Professor Beal, need I say that the society you have honored by your address has long taken these axioms to heart? To us the necessity for forbearance is not a something afar. Luxury has not been the portion of those you this day meet. We tread no path of ease. We have neither desired nor possessed the power to force our precepts on others who see life's opportunities differently from ourselves. It has been our aim to follow the self-sacrificing fathers who, believing in human liberty, turned never their faces backward excepting to gain inspiration from the deeds of co-patriots gone, never sideways except to greet companions close about.

You have caught the inspiration that binds us in fellowship. Better than you know have you written a story that must appeal to others, unaware of the deeds of our people, past and present. Whilst others have had responsibilities great, no greater opportunities for research have come to any section in medicine than to us. Well have you said that the great American flora has been our field. From our very incipiency have we searched its wealth. Whatever grows on mountain, prairie or desert, in lake or swamp, has been our developing care. Seek our literature (this you have done). There, recorded, lies the evidence.

Professor Beal, need I say that your words come not as empty sounds, bespeaking either random thought or artful pleasantries, to those who this day have so intently listened. In it all, as could be gleaned from your address, the one great ideal of our people is embraced by the one word, *service,* service to the cause of medicine in general, service to whosoever practices in any section of the field, service to humanity at large, above all, service to America, first, last, and all the time. Between us and other physicians, whatever be their faith or wherever leads their path, stands no closed door of our construction. This, our code of ethics, The Golden Rule, forbids. Never, from our side, can such a door be locked or latched against any one who seeks our aid. This, too, is our inheritance from the past, as exemplified in the recorded acts of the "Fathers."

And yet we claim the privilege of a family home where untrammeled, on lines that appeal to us, we may develop the materia medica that is our special care and where we may, in utter freedom, either accept or reject that which lies on the outside. The "Fathers" acknowledged the claim of no man as "Master." In this lay their great strength as well as their chief misfortune, for in the eyes of many who viewed things differently this spirit of independence brought upon them the stigma of being "irregulars."

That we have been fair in our methods your address testifies. Not a misnamed drug was ever offered by one of the "Fathers." Our materia medica publications and our dispensatory carry the title of no Eclectic compound the names of whose ingredients have been suppressed. In behalf of humanity, as well as in a laudable effort to make a return to physicians in

other sections of medicine for their generous contributions, we have aimed to give as well as to receive. That this effort has not been a failure is evidenced in every strain of the address you have so carefully prepared. And the research you have devoted to our literature and our processes makes your views unquestionable "authority." But let these things pass. Limited time bids me pause, in the face of the wealth of opportunity offered by your address. And yet I must crave a special privilege.

Professor Beal, may I not be permitted to add a word to the tribute offered by our president, Dr. Ellingwood, in behalf of him to whose address I have the honor of responding? And may I not also add that, were the speaker of the day not present, praises unmentioned would be extended our honored guest? What I have to offer may, however, be distasteful. If so, I assume the whole responsibility; the fault is mine.

Fellow members, the words of encouragement we have this day received are awarded by one who is second to none other in America's pharmaceutical councils. A past-president of the American Pharmaceutical Association, he has this year received the Joseph P. Remington gold medal, awarded by the New York Branch of the A. Ph. A. to the man who has in pharmacy accomplished the most during the past year. This much can I say in decorum, even though the recipient be present. An honor that we most deeply appreciate is it that this man of balanced views and careful research has openly, before the whole world, as a result of his investigations, offered an address that should delight all who listened as well as all our members who will be privileged to read it in print. Especially does this address merit thoughtful attention from co-laborers in other schools of medicine.

Lastly, may I not also add a word concerning him who is privileged to make this response? The laudatory words I have spoken of the "Fathers" who are gone could scarcely with propriety have been uttered had not this privilege been given me by the cordial address of Professor Beal. As I speak, the faces of the "Fathers" so often named in this response rise before me as in life when they were my companions. The very last of that charmed circle, "The Old Seven," am I. To honor them is for me a right. Neglect would be a crime.

Professor Beal, in the name of the members of our society, both present and absent, in the name of Eclecticism and all embraced in its fold, present or absent, in the name of medicine and pharmacy, regardless of sect or section, in the name of the "Fathers," in the name of "The Old Seven," whose deeds can never fade, and lastly in my own name as voicing the thoughts of those of the society about you, one and all, I extend to you our heartfelt thanks for this your inspiring, your phenomenal address.

INFANTILE PARALYSIS—RESULT OF CONTINUOUS INVESTIGATION.

C. W. East, M.D., Springfield, Ill.

It has been my pleasure for years to be associated with Dr. Ellingwood as a neighbor, friend and practitioner. He has been in my home in many times of stress, and I believe I have been able on occasion to be with his dear ones in their times of stress. But this by the way.

What I have to say is simply a review of everyday work, and I ask your indulgence as I attempt to present it in a very informal manner. We are to discuss, as the president has said, the poliomyelitis problem. That is a problem really because of its epidemic characteristics. I have thought to divide the subject into three heads, whether I discuss them all or not. The first is epidemiological; second, clinical; and, third, to discuss from the viewpoint of preventive medicine, or public health, or, you may say, the sociological aspect of this problem.

And first as to the epidemiology. I believe and I do not think I am alone in that belief, that we are confronting a disease which takes on, not only communicable characteristics, but physical, in the method of its appearance as an epidemic or series of epidemics. Following the recent incidence of this disease in the United States, it may be stated that from 1907 to 1916, not quite every year, but almost every year, were sectional recurrences of epidemic paralysis in the upper Atlantic and New England states. The incidence in that region seemed to reach a climax in 1916, when New York State alone had about 13,000 cases reported to the Department of Public Health. Since then the disease in that region has been of sporadic type, the state of New York, with its ten million population, having reported in 1917 only about seventy cases in the entire state; and there has been no recurrence since then of epidemic proportions of epidemic infantile paralysis. However, there seems to be, as in many, if not all, other epidemic types of disease, a westward trend, and, beginning definitely in 1916, the states in that region—the Great Lakes and the Mississippi Valley—began to have a great increase in this disease. I have mentioned New York, on the Atlantic seaboard, because of its greater population, as it had the greatest number of cases. Perhaps not the greater percentage. Indeed, Vermont, with a small population, had a greater percentage of cases; but New York was the center of a widespread area of the incidence of this disease. So, Illinois may be considered to be the center of a widespread of the incidence of this disease, reaching as far west as Nebraska and including Wisconsin, Minnesota, Iowa and Missouri. In 1916 there were reported to the State Department of Public Health about 1,000 cases. As many more unrecognized cases have since been discovered, largely by the agency of the Department of Public Health, so that it is not far from the truth to say that in 1916 in Illinois we had about 2,000 cases of epidemic paralysis. In 1917 we had a similar number, and in 1918 a lesser number, but still over 1,000. The history of other great out-

breaks of this disease seems to be in progress of repetition, and, while we cannot be dogmatic, the epidemic prognosis of this disease in this region, in my judgment, is favorable for the next six or seven years. There may be a year or two missed now and then, but, reasoning from the energy of the epidemicity of this disease in other regions, it is possible that the profession may have to confront this disease in epidemic proportions in this Middle West at least for some years to come. I may explain my view of the epidemic prognosis to this extent—there are some evidences that out through the section between the Mississippi River and the Pacific Ocean there are beginning to appear outbreaks of this disease tending toward epidemic proportions. I would be most happy indeed if this prophecy should fail; but we cannot wisely disregard this morning the cyclical appearance in a given region covering several nearby states—we cannot wisely disregard this aspect of the question. And I may say in passing that we have a very great problem already, in caring for those who have been crippled by this disease.

Now, as to the other aspect of the epidemiology of this disease, discussion will be futile. I do not care to take it up very much, because it is treated in the periodical literature, subject, of course, to modification of view from time to time. However, this is to be said, that it is undoubtedly a communicable disease; that, while, as all other communicable diseases, it is at times only sporadic, yet it usually proceeds from well defined centers, along lines of usual communication. It would have been interesting had I thrown on a screen the charts I have, having followed this quite awhile. But I have chosen not to do that at present.

We do know this much as to the virus, that it is constantly found in ear, nasal and rectal washings of patients. It is, therefore, reasonable to assume—in fact, we are almost compelled to assume—that whatever agencies may carry contamination from these sources may also transport to them virus of this disease. You ask me how we can prove it as to the exact agent. Not any more than has been proven as to the exact agencies of other diseases which are very familiar to us. At the same time, virus has been identified, and it is found in those substances—in the ordinary objects and articles which human beings handle and come in contact with.

I do not think I will say but one thing more about the epidemiology of this disease. Frequently the laity—I do not think this is a word for the profession particularly, except that it may remind you of what you may answer to the laity when public health rules are put into operation in an effort to limit the extent of this disease. The laity will say that "such and such a child had it, and no other children in the family had the disease; such and such contacts were handled, and others did not get the disease." True; but we must always remember that there are varying rates of extension of communicable disease. For instance, measles—of 100 children six years and under exposed to measles at a given time, how many would take the disease? A classmate of mine once said 130. You know the incidence is very high— 90 per cent. Whooping cough, around 70 per cent.; scarlet

fever, at the worst, about 33 1-3 per cent.; diphtheria, around 8 per cent. to 20 per cent. Infantile paralysis, in its incidence rate, is somewhere from one-half of 1 per cent. to 7 per cent.

Now, it is interesting to me—I do not know how profitable to you—to discuss the etiology of this aspect of the disease. I wish to say but one word on that subject. You know in this latitude, in the main, we are dealing with a bacteria, the lowest form of vegetable life; and we may expect—in fact, we do find—the lowest of all vegetable life to be filled with these lowest forms. I can look out now an see, presumably, a billion blades of grass. I do not see a single bloom, or tree, or other member of the highest type of plant life. In other words, this type of vegetation has a larger incidence as to the individual. You may go into the most crowded forest and find billions of the simpler forms of vegetable life as compared with the more highly developed. And you may find infinite variation among the higher classes with respect to the number of plants that will grow from given seed. And so it is among the lowest form of vegetable life. There are those which have a high rate of production of their own species, and there are times and seasons when the rates of production are high and when they are low, as might be instanced from commercial lines. There are good corn years and poor corn years, and the seed, the environment and many other factors enter into the reason why this is so. So it is here among these lowest forms of plant life, whose poisons are responsible in this latitude for the majority of communicable diseases. Epidemic paralysis is not as high in its case rate as measles; still, it is on a communicable basis, and there are times when the occurrence is relatively great. Such are times of epidemic.

Now, as to the clinical aspect of the case. I am bound to present to you as best I can in this informal way this disease from a pathological standpoint. What is epidemic paralysis pathology? It is certainly injury, more or less, to certain cells in the gray matter, usually, although not exclusively, of the spinal cord at one or more levels. It is hardly becoming for me to say to you as physicians what I am about to say, but my habit has become fixed absoluetly in trying to put this over to the laity, so I just go on and say to you that this is not a disease of the peripheral nerves primarily. It is not a disease of the muscles primarily. It is not a disease of the white matter primarily, either of cord or brain. It is a disease of the gray matter of the spinal cord, and of only a given portion of the grey matter of the spinal cord. These are the anterior horn cells—some of them are more or less injured. Sometimes all of them in a given horn, or both horns, seem to be destroyed.

What is the function of these anterior gray cells? We know at least two factors—first, trophic, and, second, motor. The motor in this section is the transfer apparatus between the upper and lower motor neurons. To put it as I do to the laity—leaving out of the discussion what we may call the mind, the emotions and impulses—all these gestures which I am almost unconsciously making. If it be my right hand, of course, the gray matter

on the left side is connected through these gray cells to the white tracks proceeding downward. We have to cross over to the other side of this series of tracks, until somewhere in the cervical enlargement of my spinal cord these tracks come to an anatomic end. There are tracks, however, which take up the work, both in immediately going out from the spinal cord and in other courses to the muscle cells of my hands and fingers. In order, however, to get across from one upper track to the lower track, there must be a transfer apparatus, which is in these complex cells of the anterior gray matter. In other words, the transfer apparatus in the spinal cord is that which is usually injured by infantile paralysis. Therefore, what you do to relieve or prevent this injury will be addressed to this transfer apparatus. You do not have to deal with the upper motor neurons, either gray or white; you do not have to deal with the lower motor neurons; you have to deal with the transfer apparatus. Only in this manner do you have any conception of the treatment of infantile paralysis.

Now, what has that to do with it? In the first place, as an early prognosis. Here is a patient stricken, and you have made it out to be a case of infantile paralysis. You are asked by the parents, "What is the outlook?" You can say this from the very first. There will be some improvement, because of these facts, which I want you to hold, in regard to the pathology and physiology of the disease. At the first, as in the case of any infection or toxic agency, the defensive forces of the economy are wrong. There is edema. This virus having a selective tendency for the nervous system, and particularly the anterior gray matter of the spinal cord, and regions round about will be on the defensive—the meninges, the lymphatics of the cord—and there will be swelling as there is in the case of any trauma of whatsoever sort, toxic or otherwise. There will be widespread interference with the neuro-muscular action as related to the spinal cord, and you promptly have your meningeal symptoms and your widespread paralysis. But, as in the case of the recedence of any injury, the swelling goes down throughout the cord, and portion after portion is released from pressure, the muscles regain their former power rather suddenly, because there has been no permanent injury. But we look for the residue, which will depend, of course, upon the character and amount of injury done to the anterior cells of the spinal gray matter, and in proportion to the injury done to these cells you will have your residual paralysis.

It may be said further at this point that there will be healing in even these cells in the larger percentage of cases for a good many months and years. It used to be said, you remember, that sixty days was the time in which we could expect improvement after an attack of infantile paralysis. We began about four years ago to limit this to two years; we now put no limitation on it whatever. Gray matter, the highest in its evolutionary reach, is also the slowest to repair, and when uninjured just as sure in its tendency to repair, although over a longer time, as is scar tissue. And if we do no injury, we may expect many of these anterior gray horn cells to recover,

and the final injury will depend, of course—the fundamental injury to the muscular system—upon the residual injury or destruction of the anterior gray horn cells. So that the tendency to recover is pronounced, and we may co-operate with that tendency if we have the patience and are willing to observe these facts.

These considerations have another direct bearing, and that is not only to prognosis, but actual treatment. First of all, let me call your attention to the fact that we are dealing with gray matter. We are dealing with gray matter. We are dealing with gray matter. It is not cerebral gray matter, although there are cases of encephalitis, and some very good observers insist on calling this acute polioencephalitis. I am speaking of the majority of cases in practice as they come, as crippled children, and as adults later. We are dealing with gray matter, and, therefore, the treament must be carried out along gray matter lines. Gray matter is always rather directly connected with what we call the voluntary motions—those functions which are carried out, at least in the mind, in harmony with the conscious purpose of the individual. Therefore, recovery must be in harmony with this conception. In short, the treatment of infantile paralysis is educational and not mechanical. I will illustrate that. A man says, "I can restore this paralyzed muscle by electricity." Possibly you may get a response, you may get a contraction, but your function that is in abeyance is peripheral action and you can not get that. If you can, why not abolish your schools and put in dynamos? You say you may improve the trophism by massage and exercise. Admitted, if the original fault be circulatory; but this neurotrophic and massage, as a rule, does damage, as does electricity. There are some cases where, as a remote accessory, these agencies may be useful; but, primarily, they are as much use to help a victim of infantile paralysis as to teach a child to play a piano or operate a typewriter.

So, the problem before us as to active treatment is that of neuromuscular re-education. And you say, "How can you re-educate, if your transfer cells be damaged or destroyed? Of course you cannot if they be destroyed; but now here is one of those happy facts which make life hopeful to the practice of medicine. In a vast percentage of cases, considerably over 95 per cent., not all of these anterior horn cells are in a residual sense often injured, and, therefore, just as in any other educational process, you may avail yourself of the uninjured cells to teach the patient a new way around in getting some ideas across between the upper and lower motor nerves. And that is what actually takes place. The child must learn cerebral initiative, muscular effort. You must have intelligent muscular function; that is the one thing that is effective in infantile paralysis.

So the treatment consists in three important things, and the first is the most important rule of all—do not harm—absolutely the hardest rule to follow. I mean what Hippocrates meant, I believe; and by reason of the facts which I have stated as to the pathology and physiology of this disease we must do no harm to these anterior horn cells by any fatigue-producing

process. I have known many cases, and you have, where efforts of a gymnastic sort have been attempted. There has been improvement, largely because fatigue was not produced, the most harmful factor to gray matter that there is—fatigue. Your psychiatrist will tell you that, your neurologist will tell you that. I have known other cases to recover that were let alone. In fact, those who have nothing done for them sometimes get along better than those who have everything done for them. There are cases appearing everywhere which have everything done for them—usually the most hopeless cases, with a fixed deformity—who have had every sort of manipulation resulting in fatigue to these already injured cells. If there has been recovery in any cases, it must, in the nature of the case, be due to the fact that, consciously or unconsciously, an educational process has been carried out.

So the three things which are fundamental in the treatment are: First, rest over a long period of time, intelligently applied; not exercise, but rest. This is not primarily muscular, but circulatory, and, therefore, must be rest that these gray cells may recover.

Second, neuro-muscular re-education; and, third, the prevention of deformity.

Now, that last aspect of the case proceeds out of all that has been said. Deformities will be produced by the overpulling on unparalyzed muscles, plus other factors, such as weight bearing and other activities; but ultimately by the overpull on unparalyzed muscles. No infantile paralysis case is a victim of a paralyzed leg, an arm, the back or abdomen. You say, "What is the matter with the patient then?" I will give you an analogy. No man who needs dentistry, unless incidentally and from a dental viewpoint, is the victim of head trouble in general. Dentists do not treat heads in general; but they pick out a certain organ, or often even a certain portion of a certain organ, known as a tooth, which is pathological, and treat that tooth. You do not take your head to a dentist; you take your teeth. And so, for the treatment of infantile paralysis in a practical way, we must depend on exact and early diagnosis, or residual paralysis; in other words, a review of your muscle anatomy. No one can have the slightest appreciation of the treatment of infantile paralysis unless he is prepared to make a muscle diagnosis.

The deformity having occurred, either from mistreatment or in any way, the first thing to institute is correctional treatment. I have gone over the three factors in the treament of infantile paralysis. They are based upon an exact muscle diagnosis of the injury, and, in order of their importance, they are: Rest for the recovery of the spinal gray matter which is injured; second, prevention of deformity to prevent muscle injury, and, third, neuro-muscular re-education, teaching the child the way around an injury in cerebral initiative and intelligent use of the muscles which are not affected.

I pass to a final word as to the sociological aspects of the case, and I shall not be long. It is owing to the brilliant work of Lovett, of Harvard, that this work has been put on a substantial basis, clinically and sociologically.

The surrounding New England and near-Atlantic states followed out the directions of Lovett. I mention that, that proper credit may be given him. And then, in our own state of Illinois a comprehensive effort was instituted to meet the condition which had supervened from these epidemic types. We went at it in a rather meager way, a one-horse way—and I was the horse—to establish in afflicted sections field dispensaries and clinics, always in connection with the local profession,—the organized profession, if possible—hoping (and succeeding) to come to the aid of physicians in communities where practice is not specialized. Second, to keep these children out of the hands of quacks and proprietary people; and, third, to put them back in the hands of their own practitioners, with such directions from the state as might be valuable and needed. We organized these clinics on that basis. The majority of these cases were among the poor—I suppose because the poor are in the majority. This treatment necessarily is long and tedious, just as any educational process is long and tedious. There are various appliances sometimes necessary in order to do the things which I have spoken of —to secure rest and prevent deformity, and to some extent enable the child to properly carry out muscle function already begun, after its interruption by this disease; and we had to have what we called a brace fund in each community. We have been able to arouse enough interest locally to provide every child needing it with whatever appliances it needs. The municipalities have co-operated, the counties have co-operated, and clubs and philanthropic societies; the religious societies have co-operated to raise a local fund, locally administered, in these communities, where people may pay back, in installments, what it has cost to provide these appliances. I may say, and I know I will strike a note which Dr. Ellingwood will be glad to hear, as I understand it, you insist on giving the prescription which you know to be right in the right way—that is Eclecticism. I do not claim to deep understanding, but I believe that is right. And so I insist that we prescribe the brace that we know is the right one. We do not send to a commercial house for them; we do not let it be a matter of haphazard any more than you would in your drug prescriptions; these braces are prescribed for a purpose. We have sixteen clinics in the state of Illinois. We could have seven or eight more, if we had the man power. The state has promised that, however, after this Legislature dies. We should have at least thirty clinics, because, as I go about I find many cases which have been called rheumatism, displacement of the spine, subluxation, and the like; some which have been called cerebral meningitis or cerebral palsy. Of course, these present crippled conditions, and we are trying to meet them. This is the best way we know to meet the problem. The greatest need is for a surgical institute. There is a small percentage of cases which may be benefited by certain operations. We have been able to arrange in our private service some relief for some of these patients. We see about one hundred crippled children a week. Our strength holds out to hold three clinics a week, and we try to run the clinics about nine months a year. The physician always

co-operated, except in one case—a fellow who thought he could get a per cent. from an instrument house.

We feel we are meeting the problem. As time goes on the problem may be larger. We would be glad if it would disappear. The majority of these children will be charges on society, unless they are put back into the way of reconstructive function; and this is true of any infantile paralysis case, old or new. We are to put on their feet, with some form of efficient leg motion, over 85 per cent. of the cases. Gentlemen, I thank you.

DISCUSSION.

Dr. Young, Neoga, Ill.: Do you recommend treatment of these cases independent of circulatory conditions?

Dr. East: No, we do not wish them to be independent of circulatory, or digestive, or any other conditions that affect the child's health. As a matter of fact, there is many a child brought to the hospital for which nothing can be done until the child is rested and nourished, and they do very well. Of course, give a child whatever it needs, but put first things first—that is everything.

Dr. Miller, West Virginia: I would like to know something about the early differential diagnosis.

Dr. East: I should be glad to discuss that, but it is a long story. I think we want to keep in mind that this is always a nervous trouble. Let me give you a little method which has been useful to me. I provided some loose leaves, and at the head of the columns I had "gastrointestinal," "neurological," "circulatory," and one or two others. On going to a case, first, I take the history very carefully, and I write out under each of these headings the findings from the history; then make careful physical and neurological examinations. And then in 1912 I began to make microscopic studies, and put them under their proper heading, both as to history and physical findings, and invariably I find that under the neurological column I have it well filled in all cases, or at least predominating over the other columns. If you will do that in a hundred cases, you will find your charts have a surprising similarity, you may almost say identical, with the predominating symptoms under the column "neurological." Then, of course, you search for your residual, flacid, atrophic paralysis.

Dr. Wesley Van Nette, Clyde, O.: Would you get any benefit from giving phosphate of lime, or something of that kind?

Dr. East: I would not say you would not get any benefit. If the patient needs this, by all means give it; but you should put first things first, and depend on your re-education for the primary things. If these agents would assist in nerve nutrition, by all means give anything; but do not depend on it altogether.

Dr. T. D. Adlerman: Is is not a fact that the statistics of poliomyelitis are very misleading? Is it not a fact that about 30 per cent. of the cases reported in New York City were cases of coryza, measles and other diseases, and that this applies also to other cities? Is it not a fact that the profession and the public at large were suffering from hysteria, and that boards of health requested reports, and that these reports came in, and after thorough investigation they were reported as non-cases? Is it not a fact that, with all the measures instituted, the results are about the same today as years ago?

Dr. East: In the way I understand your question, none of these things are facts. As matter of fact, in 1916 we had, to my certain knowledge, over 1,800 cases which showed the residual, flaccid, atrophic paralysis. I

worked in New York State previous to that. There will be mistaken diagnosis and mistaken reports; but the woman is here this morning who, with me, has collected all of these reports. There is a small percentage of error, but in the main the facts held as stated. At any rate, we are seeing over 100 crippled children, as a result of infantile paralysis in the state of Illinois every week. There are mistakes made; but, on the other hand, we are very careful with our methods of getting the history, making the physical examinations, and putting them in the category of epidemic infantile paralysis. We are meeting the problem, and it is not an imaginary or hysterical problem. It is epidemic infantile paralysis we are having to deal with—with a fair margin of mistakes, of course.

A MEMBER: What about the Rosenow serum?

DR. EAST: I hesitate to say much about it. It is not conclusive. Of course, my work is mainly reconstructive, but this is true: that, in every community where that serum has been used, and we got in about four months after the epidemic, we have a number of atrophic paralysis cases to deal with.

DR. T. D. ADLERMAN: I move that a special vote of thanks be extended to Dr. East for his lecture this morning.

Motion seconded and carried by rising vote.

INFLUENCE OF THE WAR ON THE CULTIVATION OF MEDICINAL PLANTS.

CHARLES G. MERRELL, B.S., CINCINNATI, O.

The monetary value of the chemicals and dye stuffs imported into the United States from Germany was so much larger than that of the botanical drugs imported that the general public, and even the medical public, has not appreciated the serious character of the problems which were imposed on the manufacturer of pharmaceutical preparations by the war. Granted the raw material, the skill and the installation, chemicals can be produced as well in a laboratory located in Cincinnati as in one located in Elberfeld or Mannheim.

But medicinal plants cannot be produced at will. The several species of plants have very definite likes and dislikes. They will thrive only in certain localities and under certain conditions. Even if we duplicate the conditions, they may refuse to grow in other localities. Moreover, the growth of most medicinal plants is slow. The root of hydrastis canadensis is not suitable for use in medicine until it is four or five years old. Even in annuals, we must have seed to begin with, must take a year for a crop, and we then are not quite sure of results in a new locality.

When hostilities began in 1914, the prices of crude drugs rose so rapidly that it was almost impossible for the manufacturers to keep track of them. When these facts became public, popular attention was directed by magazine and newspaper writers to the profit from the growing of medicinal plants. These articles, written with a view to be interesting rather than accurate, painted in glowing colors the fortunes to be won by the cultivation of medicinal weeds or the growing of plants, which could be grown like hay and sold

at $900 a ton. It is true that there is a possibility of profit in the growing of medicinal plants; but there are so many contingencies connected with the undertaking that but few could realize any profit on them.

Dr. W. W. Stockberger, physiologist in charge of drug, poisonous and oil paint investigations of the Department of Agriculture, who has been engaged in the study of this and allied subjects for the Government for many years, has paid particular attention to the commercial aspects of the growth of medicinal plants, and is of the opinion that no great success can be achieved in this field, except by a specialist with at least $50,000 capital, who grows plants on a sufficiently large scale to enable him to employ the best kind of expert advice and to provide the many special facilities required in the growing and the collection of these plants. For instance, the plant stock for one acre of hydrastis would cost $1,500. Belladonna seed does not germinate well in the open, and the plant must be grown under glass. The greenhouse space required for five acres of belladonna will call for an investment of from $2,500 to $5,000. The total quantity consumed of any one of the hundreds or more drugs which could be grown in the United States is so small that over stimulation of production might easily result in a decline in market prices, which would be ruinous to the grower.

Quite naturally, the largest consumers have the greatest concern in the matter of future supplies, and several of the manufacturers of pharmaceutical preparations have expended large sums of money in experimental production of certain botanical drugs. One firm, Johnson & Johnson, manufacturers of plasters, has carried on an extensive series of experiments in the production of belladonna on a commercial scale in many different states, enlisting the co-operation of Prof. Albert Schneider, of San Francisco. In California at one time they had forty acres of belladonna under cultivation. The first few pounds of this drug cost them about $1,000 a pound. The experiments which they have made, however, have been conducted in a thoroughly scientific manner, and accurate and detailed accounts have been kept of the experiments and of the results, which will go far towards solving the problem of the profitable cultivation of this particular plant in the United States. Largely as a result of their work, we already produce enough belladonna to supply our own needs.

Several other manufacturers have shown an equally liberal spirit, devoting large sums to scientific experiments on a commercial scale, and giving to the pharmaceutical world the benefits of their experience. I, myself, have been much interested in this problem, and have been able to aid in working out some of the problems on a practical scale by giving financial assistance to independent growers in different sections of the United States.

There has developed in medicine a group of men who, following the lead of Germany, would have the practice of medicine governed and dominated by the laboratory. These men believe in nothing that can not be proved in the laboratory. If they cannot isolate from a plant an alkaloid or a glucoside which has a clearly defined and prominent physiological action, they deny

the plant any therapeutic activity. They ignore the clinical aspects of medicine entirely. The mere fact that hundreds, and even thousands, of case histories have been reported in which a particular drug has proved beneficial is wholly ignored. "If it cannot be proved in a test-tube, it is not true" is the motto apparently adopted by this group of men, who are largely responsible for the spread of therapeutic nihilism, and whose attitude towards medicine and therapeutics has done much to stimulate the cult of drugless healing in every direction.

In commenting on the work of these men, Dr. Stockberger said, in a paper presented by him before the Washington branch of the American Pharmaceutical Association last May:

"The grower of botanical drugs will be obliged to face the antagonism of agitators opposed to the use of these commodities. There is a well intrenched school of thought in this country which ridicules the use of botanical drugs by the medical profession. But it is absurd to say that, because a drug has never been shown to have any chemical individual in its composition to which therapeutic activity can be attributed, it is valueless for the treatment of disease. The fact that no potent principle has been reported is no proof that none exists. The chemistry of botanical drugs is in its infancy. Systematic physiological experimentation has not even begun. Medical science is the least exact of any, and the empirical tests of practitioners over many years attest the therapeutic importance of drugs which are ridiculed by others. Many of these drugs are recognized in the pharmacopœias of the world, standards which have been adopted by the laws of the land. Careful research would undoubtedly isolate the principles on which the therapeutic activity depends. But the fact that no principle has as yet been isolated is no reason for condemning the drug. Furthermore, the beneficial effect of a mixed preparation is not due to any one component, but to the combined influence of the several ingredients in the blend."

In the ultimate analysis, therapeutics is based upon empiricism, for the correct definition of this word is: "Deductions based on experience." There is no etymological warrant for defining it as meaning "quackery," and it is most unfortunate that this false significance is attached to the word. In seeking for medicinal plants, we have availed ourselves of the empirical knowledge handed down from our ancestors or gathered from untutored savages in portions of the world not yet civilized.

Cinchona, which furnishes one of the most universally used remedies, was known as a medicine in Peru when Europeans first visited the land of the Incas. And so with nearly all of our drugs. The knowledge that these plants had medicinal qualities has not been discovered by any scientific and systematic study of the plant and its constituents, but was based upon the common practices of common people. We only studied the drug after we knew that it possessed therapeutic virtue.

The savage took the fresh plant, made an infusion or a decoction, and administered this to the patient. Being unable to always command the fresh

drug, we set about drying it and making extracts and tinctures, which, to a greater or less extent, represented the virtues of the plant. Many observant practitioners of medicine realized that the preparations made from the dried plant did not produce exactly the same results as those prepared from the fresh plant, and there grew up a very considerable number who preferred a preparation made from the green plant. These practitioners asserted that they found material differences in the therapeutic effects produced.

Modern studies of the constituents of plants prove that this deduction had a sound basis in the composition of these constituents. Our early studies of plant constituents had been limited to the isolation of alkaloids, resins, oleo-resins, oils and glucosides. Now we find that plants contain many constituents, important both from a biochemical and from a therapeutic point of view, which come in none of the categories named. There are protein bodies, enzymes, oxydases and ferments which, in the living plant, play important parts in the internal metabolism which enables the plant to make use of plant food and to dispose of the products of plant life. By using the green drug, we not only get the benefit of the full therapeutic value of the plant in its natural condition, but we prevent the changes which take place in the drug in drying. The changes may be beneficent, increasing the therapeutic value of the drug, or they may be detrimental, causing the decomposition of valuable constituents present in the plant and sometimes the formation of harmful products of decomposition.

Prof. E. L. Newcomb, of the University of Minnesota, has directed attention to the effect of the ferments present in digitalis leaves upon their therapeutic qualities, and, in order to avoid this fermentative action, he proposes that the leaves be dried quickly, as soon as gathered, as is done by the French. The use of the green drug accomplishes all that is accomplished by quick drying, and more, for it gives us the constituents of the drug unchanged, just as they existed in the growing plant, while drying undoubtedly affects the constituents of the drug somewhat, even if done rapidly. These green drug preparations not only are more active therapeutically than those made from the dry drug, but they have a *different* therapeutic effect. *Indeed, I am confident that much of the doubt which has arisen in certain circles in regard to the therapeutic value of some drugs much used by Eclectic physicians has been due to the use of faulty preparations of the drug.* The drug itself has not been at fault; the fault has been in the methods of collecting the drug and making the preparation.

In the living state the metabolism of the plant is maintained at a normal level by an equalization of the catabolic and anabolic functions of its organism. As soon as the life processes of the plant are interrupted by gathering it the catabolic processes cease to operate, but the anabolic do not necessarily come to a close and these processes may produce toxic substances in a plant which was innocuous while in a growing state, and may destroy in the dried drug the therapeutic qualities present in the green.

Science has only just now been able to explain the reasons for deductions

which were empirical only in that they were based upon careful observation. This explanation confirms us in our high regard for the wisdom of those close observers, among whom I am proud to name my grandfather, Dr. Wm. S. Merrell, one of the early leaders of this association and at one time president of the Eclectic Medical College in Cincinnati, who first realized from their observation the difference in the therapeutic action, qualitative as well as quantitative, between the dry and the green drug.

The map shown gives the location whence the principal supplies of the more important drugs affected directly by the war were drawn. The figures indicate the source of the drugs named on the accompanying key:

(1) Opium, (2) cinchona bark and quinine (produced in the island of Java, a Dutch possession, but marketed through Amsterdam), (3) ergot, (4) cantharides, (5) lycopodium, (6) muskroot, (7) Russian isinglass, (8) anise seed, (9) coriander seed, (10) henbane leaves, (11) fennel seed, (12) belladonna leaves, (13) althea root, (14) arnica root and flowers, (15) buckthorn bark, (16 digitalis, (17) dandelion root, (18) chamomile flowers. (19) elder flowers, (20) marjoram, (21) burgundy pitch, (22) horehound, (23) stramonium leaves, (24) Dalmatian insect flowers, (25) celery seed, (26) lavender flowers, (27) thyme leaves, (28) uva ursi leaves, (29) larkspur seed, (30) Bourbon vanilla beans (raised in French possessions), (31) attar of roses, (32) canary, millet and poppy seeds, (33) burdock root, (34 valerian root, (35) orris root, (36) juniper berries, (37) olive oil, (38) lemon, orange and bergamot oils, and citric acid, (39) saffron flowers, (40) gum arabic, (41) Alexandria senna leaves, (42) gum tragacanth, (43) colocynth apples, (44) gum olibanum, (45) myrrh, (46) henna leaves, (47) tamarinds, (48) cassia fistula, (49) cacao butter.

I will mention only a few of these drugs, giving the price in August, 1914, and the highest price to which they were forced during the war, at the same time pointing out their geographical source:

(14) Arnica flowers, from Germany, rose from 11c to $3 a pound; (16) digitalis, from Germany and England, from 7c to 90c a pound; (12) belladonna root, from Germany, from 10c to $4.50 a pound; (10) henbane, from Germany, Russia and England, from 7c to $3.50 a pound; (3) ergot, from

Russia and Spain, from 54c to $3 a pound; (1) opium, from Turkey, from $7.35 to $30 a pound.

Even those regions not directly involved in the war were cut off from communication with the world of trade either completely or partially by the commandeering of ships for military uses. With this curtailment of supplies came an enormous increase in demand, for an army consumes or wastes huge quantities of drugs, much larger than the same number of men would use in civil life.

Our dependence on these sources of supply was partly due to tradition, partly to economic causes. Cheap peasant labor made it possible to produce opium in Turkey, for instance, at a price far below what it could it be produced here, although the climatic conditions in some sections of the United States are quite as favorable for the growth of the poppy as that of Turkey, our principal source of supply for the drug. Even some of the drugs which are indigenous to the United States were imported from Europe, as it was cheaper to do this than to collect them here. Digitalis, for example, is found in large quantities as a weed in Oregon, but was never collected there on a commercial scale until the war shut off the European supply.

When the war began every agency was set at work to make good the deficiency in the drug supply, the government taking the lead. The Department of Agriculture had been engaged in the study of the agricultural possibilities of medicinal plants for twenty years or more and the drug plant work of the Bureau of Plant Industry of the department had been and is conducted with a view to rendering service to the American public. Every effort is made to give fair and impartial consideration to the respective interests of the producer of crude drugs, the drug manufacturer and the consumer of drug products. The purpose of the government is to demonstrate, if possible, conditions under which medicinal plant cultivation in this country may be placed on a sound commercial basis.

The development of the camphor industry in Florida well illustrates the general plan and method of work pursued by the Bureau of Plant Industry. In the Orient the accepted method of procuring camphor has always been to cut down mature forest trees and to distill the camphor from the trunk and larger branches. Some twelve years ago, when the Office of Drug-Plant Investigations first considered the commercial production of camphor in the United States, it became evident that radical changes in the method of camphor production were necessary to the establishment of the industry in this country. It was found that the leaves and twigs of the young camphor tree contain a high percentage of camphor, and it was later demonstrated by planting young camphor trees in hedgelike rows. A crop of leaves and twigs could be harvested in seven or eight years from seed and annually thereafter. Camphor seed was obtained from camphor trees introduced into Florida many years ago for ornamental purposes, and many thousands of young trees were carefully reared in nurseries, after which they were transplanted to a field and set out in hedgelike rows.

Instead of waiting a half century and then securing but one crop from the land, it has been shown that a camphor plantation can be developed in about the same time as an apple orchard.

Many problems connected with the growing and setting of the young plants, cultivation, harvesting and distillation, have been met and overcome.

Special machinery has been devised to replace hand labor and reduce operating costs. One of these machines successfully harvests the leaves and twigs from the camphor hedges and represents as great an advance over the former hand method as does the modern wheat harvester over the old-fashioned cradle. As a direct outgrowth of the work of the Bureau of Plant Industry two large commercial plantations of camphor have been started in Florida on which over 3,000 acres are planted with camphor trees, and the future for an American camphor industry now seems very promising.

At the experimental farm of the Bureau of Plant Industry maintained in the vicinity of Orlando, Fla., many species of medicinal and essential oil plants are under cultivation. They are first tested on a small scale to determine whether they can be grown under conditions existing in this country, and if they appear suitable for cultivation on a commercial scale they are then planted on a field scale and methods developed for growing and handling them advantageously. The cost of production and probable returns are closely estimated, since from the standpoint of the grower these are the limiting factors which determine for him the desirability of producing them commercially. These details have been worked out and published in the case of some plants, while many others are still undergoing investigation. Among these plants are lemon-grass or citronella, the source of the lemon-grass or citronella oil of commerce; monarda punctata, a possible American source of thymol and rose geranium which thrives under suitable conditions and can be made to produce a valuable oil.

About ten years ago the Bureau of Plant Industry established an experimental station in South Carolina, where they have obtained valuable data on the commercial possibilities of a large number of medicinal plants. It has been found that the economic conditions there were unfavorable for commercializing many of the species tested, but at least two small but successful new industries have been introduced in that state. One is the production of cannabis, grown from seed imported from the regions where the famous Indian product is grown. The production of cannabis in South Carolina has been closely controlled and the growers held to the high standard of quality, although this, of course, has increased the cost of production and greatly diminished the number of pounds of marketable drug obtained by the growers. Every reasonable effort is made to prevent seed production, and throughout every step in the process, from harvesting the drug to its packing for shipment, the most painstaking care is exercised in its production. Without this control the market would long since have been glutted with low grade material below the U. S. P. requirement in quality. The production of American wormseed has been successfully demonstrated, although the

market price obtainable has not been sufficient to justify the encouragement of this crop.

The growing of capsicum has been successfully introduced, since the crop yields are good and also since the field laborers accustomed to working in the cotton field handle the pepper crop very readily.

In the government drug garden at Arlington, Va., just across the river from Washington, D. C., a large number of different species of medicinal and essential oil plants is constantly under observation. Here the Bureau of Plant Industry makes many of the early trials and obtains the information necessary to the successful carrying on of the experimental work on a large scale elsewhere.

Atropa belladonna was one of the early trial crops and the cultivation of this important drug has now been developed to the point where the domestic production is sufficient to supply the market demands. Belladonna is also grown on a large scale in Southern California, the area under cultivation in 1918 being estimated at 95 acres. In the entire country about 270 acres of belladonna were harvested, distributed as follows: California, 95; Michigan, 44; Pennsylvania, 41; Indiana, 32; New Jersey, 34; Virginia, 21; Illinois, Wisconsin and Iowa 2½.

Datura stramonium was also one of the early experimental crops, but the abundant supply of wild material has always been an obstacle to its extended cultivation, although for several years a small acerage has been grown in the vicinity of Porterfield, Cal. During the early period of the war, before the domestic supply of belladonna was sufficient to meet our needs, atropin was manufactured from stramonium, which consequently was in considerable demand.

The peppermint industry has been conducted successfully with all modern appliances, such as tractors, etc., on a large scale in Michigan.

Some progress has been made with the cultivation of henbane, but this crop has proved to be a difficult one to grow in most localities where it has been tried. Practically all of the domestic product produced under cultivation comes from certain localities in Michigan and efforts are also being made to develop the wild sources of supply already existing in the Northwestern States, especially in Montana. In some localities wild henbane the height of a man is of frequent occurrence, and I am informed that on the outskirts of some towns in Montana henbane grows as a weed to such an extent that town ordinances have been passed requiring its destruction. Since the plant maintains itself without cultivation in Montana and adjacent regions, this would seem to be the logical place to establish a permanent industry in its production.

The growing of digitalis has been carried on on an experimental scale by the Bureau of Plant Industry for many years, and small areas are now being made to yield a very satisfactory product by commercial growers. However, prospective growers of digitalis need to consider the possibility of competition from the wild supply which exists in Washington and Oregon.

During the war an appeal was made through the Schools of Pharmacy of the University of Washington at Seattle, and the State Agricultural College of Oregon at Corvallis to the people of those states to collect and contribute digitalis leaves to the government for the use of the army. To an assistant of the Bureau of Plant Industry stationed at Seattle was assigned the duty of receiving, inspecting and sorting the hundreds of packages of digitalis leaves received in response to this request, and as a result there was placed in the hands of the government, without cost, for the use of the army hundreds of pounds of digitalis leaves. In this way there was obviated any danger of shortage which otherwise might have occurred through the interruption of ocean traffic occasioned by hostilities.

Another phase of the activities of the Bureau of Plant Industry is concerned with the encouragement of the development of medicinal plant gardens in connection with schools of pharmacy. Drug gardens are carried on at some fourteen different schools of pharmacy for the instruction of the students in the recognition of plants rather than for their instruction in the agricultural problems involved in their growth on a commercial scale, though some of these college gardens have done good work in this direction also. One of the earliest and best known of these gardens is the co-operative one established by the Bureau of Plant Industry and the University of Wisconsin at Madison. During the past two years this garden has been materially enlarged and improved and now affords a basis for information on a scale considerably larger than that found in the average garden of this class. The Bureau of Plant Industry renders every assistance possible in the establishment of these gardens, sending on request blue prints of plans and lists of species recommended for cultivation as well as supplying seeds and living plants with which to set the work into active operation. Among some of these gardens in the establishment of which the Bureau of Plant Industry has assisted are the following: School of Pharmacy Garden, Brookings, S. D.; Drug Garden, University of Denver; School of Pharmacy Garden, Valparaiso, Ind., in which an unsightly and weed covered ditch has been developed into an ornament to the grounds of the institution and a source of pleasure and instruction to the students. The drug garden of the School of Pharmacy, University of Nebraska, is one of the most artistic and beautiful formal drug gardens in the United States. The University of Minnesota has a very extensive drug garden, including several greenhouses. This is the school which did such excellent work in connection with the digitalis supplies for the army and navy.

Before the Civil War Cincinnati was the principal market for indigenous crude drugs, which are most abundant in the Blue Ridge Mountains, whence 75 per cent. of our indigenous drugs are drawn. In a recent botanical survey of that section by the Department of Agriculture more than 600 plants were found which are, or have been, used in medicine. These are gathered by the hill people, who lead a very primitive life.

As I have already said, the growing of medicinal plants for profit requires

much expert knowledge and involves the investment of large capital, but the growing of a medicinal plant garden for pleasure affords a delightful scientific recreation for those who care for gardening.

Eighty-two of the drugs in one of our trade catalogs are listed by horticulturists as perennial flowers, not to mention annuals, vines, shrubs and trees, such as celastrus candene, elder flowers and dogwood.

I myself have just begun such a garden of flowering drugs on a small scale purely as a recreation. If any of my audience care to take up this delightful recreation he can obtain many useful suggestions from Dr. W. W. Stockberger, Bureau of Plant Industry, Department of Agriculture, Washington, D. C.

Never again must we allow ourselves to become so wholly dependent on outside sources of drug supply. We have begun to remedy our shortcomings in that direction and the foundations are laid for establishing our independence. While we must foster all the individual efforts being put forth so long as they are intelligently directed, our ultimate salvation in this direction will, no doubt, be the establishment of great drug farms such as have been carried on for generations in England by such firms as Stafford Allen & Sons, Allen & Hanburys and others.

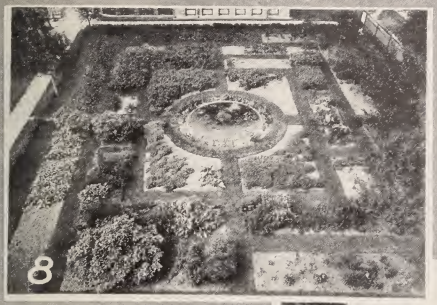
The therapeutic nihilism which has been taught so assiduously by many of the leaders in the medical profession has caused the people to wander away from medicine and a very large proportion of the people in the United States (it is estimated from one-fourth to one-third) have taken up Christian Science, Osteopathy, Chiropractic and all the hundred drugless cults which have appeared within the last quarter of a century.

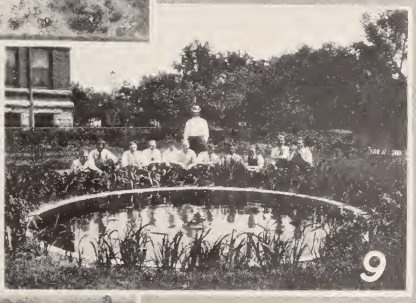
You physicians of the National Eclectic Medical Association have steered clear of this error and have retained the faith of your fathers as to therapeutic values. You do not allow yourselves to be dominated by the test-tube and the laboratory. You have accepted clinical medicine as the best teacher, and it affords me great pleasure to bring to your attention what I am sure is one of the basic causes for the discontent of so many doctors with botanical drugs and their preparation, namely, their faulty preparation. Your experience and that of your fathers has taught you that there is therapeutic value in certain botanical drugs. Their virtue is present in the green drug. When it is impossible to administer the fresh plant, preparations made from the green drug will present the virtues of the fresh plant in the unchanged form. If physicians will insist upon having preparations made from the green plant we shall soon have a rejuvenation of our faith in the efficacy of drugs and an end of therapeutic nihilism in medicine.

I wish to acknowledge my indebtedness for assistance in collecting these random notes to Dr. W. W. Stockberger, Dr. F. B. Kilmer, Professor Edward Kremers, Professor Henry Kraemer and Professor E. L. Newcomb, who have done important service to our country in promoting the growth of medicinal plants in the United States and from whose writings I have made liberal quotations.

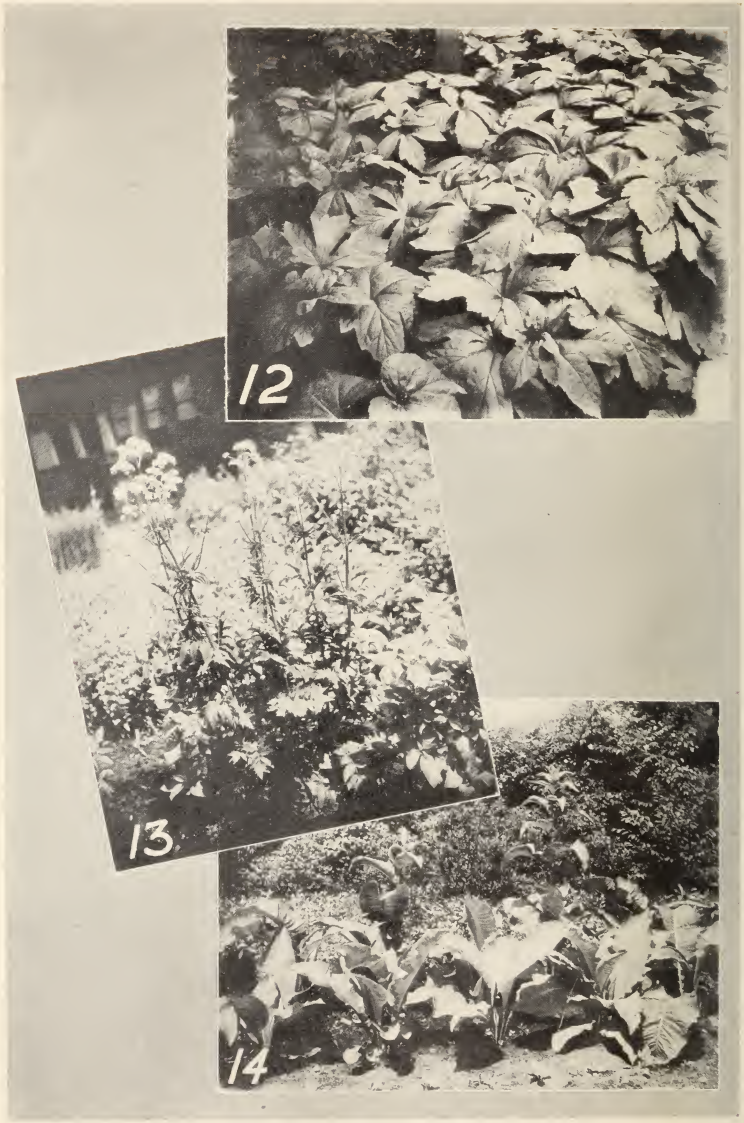
1. Medicinal Plant Garden—University of Minnesota.
2. Medicinal Plant Garden—University of Minnesota.
3. Echinacea Angustifolia.

4. Digitalis Purpurea.
5. Matricaria Chamomilla.
6. Delphinium Staphisagria.
7. Verbascum Philomoids.





8. Pharmacy Garden—University of Nebraska.
9. Pharmacy Garden—University of Nebraska.
10. Digitalis in Flower—University of Nebraska.
11. Half acre of Digitalis—University of Wisconsin.



12. Hydrastis Canadensis.
13. Valeriana Officinalis.
14. Inula Helenium.

THE NON-SPECIFIC PLANT PROTEIN THERAPY.

A. S. Horovitz, M.D., Cincinnati, O.

Mr. Chairman: Permit me to express my sincere appreciation of your kind permission to bring some of my therapeutic views to the attention of this eminent gathering of brother physicians.

Gentlemen: I wish to also thank the members individually for favoring me with their presence. Ten days ago I received an invitation from your distinguished president, Dr. Ellingwood, requesting me to prepare a paper, if it was possible to do so in such a short time. I was very glad to accept this invitation and I shall take pleasure in explaining briefly plant protein therapy, which was originated by me.

This therapy is not in an embryonic state and I shall therefore take up first the most important fundamental and demonstrable facts only.

Before entering upon a description of the subject I wish to say that the physiological disturbances of the living body are caused in a large majority of instances by foreign proteins composed of molecules of different specific gravity than the molecules which build up the protoplasmic structure of the normal cells. These foreign proteins include food particles which have escaped the digestive tract without undergoing complete assimilation. The various invading micro-organisms also come under this head and in addition the end results of their metabolism, *i.e.,* the set-free toxines and the toxines of their dead bodies. Biochemically, it may be stated that every protein molecule which is different from the normal is a foreign one and contains a different quantity of inorganic matter than do the normal body builders. These foreign proteins may cause cell complexuses without differentiation with either benignant or malignant tendencies.

With your permission I shall try to explain briefly the biochemic destructive action of invading micro-organisms, foreign proteins and the neutralizing biochemic action of plant substances heretofore not employed in therapeutics. Before doing so I believe it advisable to mention that the moment an active, living micro-organism enters the host it needs to secure food and protection. It therefore begins to produce certain destructive chemical substances which will perform different tasks. These substances are different for every infection and therefore are characteristic to their original chain. These substances will affect their environment helpfully to themselves in two ways; in one way to destroy the natural defense of the normal body cell and then to transform such weakened environmental cells for their own nourishment for the purpose of the propagation of their kind; in the other way to prevent phagocytosis, our inherent resistant power. In this way an endless chain is formed by which the destructive action goes on progressively in the human host, provided that our immunizing power goes not gain ascendancy in the battle.

These characteristic substances, which are responsible for the virulence of the infection, are designated as virulins and are different in each disease.

Their action is a plain enzymic action, which can only be counteracted by an enzyme of great affinity to the invader.

Here I must draw your attention to the fact that an enzyme is always formed by protein substances containing a considerable quantity of inorganic matter, i. e., an enzyme is a combination of inorganic colloid with an albuminoid colloid in which combination the albuminoid colloid supports the inorganic. In cases of infectious diseases the invading micro-organism and its metabolic by-products start their enzymic action, which is counteracted to a certain extent by the enzymic action of body tissues, including the constituents of the blood. Consequently a struggle commences which goes on for some time until either the two antagonistic enzymes neutralize each other's influence and the host escapes in a generally run-down condition which is so common in every day practice, or the invader gains the ascendency and the patient begins to lose the battle. In this case the strong enzymic action of the invading micro-organism not only neutralizes the power of resistance, but the surplus invading enzymes will commence their disturbing action upon the metabolism and their destructive action upon the tissues. The moment the virulins of the invading micro-organism gain the upper hand of the natural resisting power external interference is necessary to reinforce our power of immunity with ready-made enzymes which will have the characteristic power to tear down the intruder and liberate the helpless defenders of the body.

As previously stated the enzymes of the invaders differ in character and consequently the disturbance caused by their activity is also different and will require different anti-enzymes, anti-ferments, protein colloids for their neutralization. It should be borne in mind, however, that the protection between the invading micro-organism and its enzymes is mutual and equivalent and their destructive influence is in one direction by virtue of their association, which renders the same specific. To overcome their destructive influence the serologist and bacteriologist tried to find a specific anti-enzyme for each infectious disease, but neglected to have in mind the fact that we may accomplish an absolute hydrolyzation in the test tube with one enzyme which can act to the extent that we may get all the metabolic substances derived from the micro-organism in a state of ammonia and volatile acids; but the enzymes of living matter can not accomplish this work by the aid of one single agent. To accomplish this whole transformation there is needed an assembly of a series of enzymes each of which accomplishes a strictly defined part.

Let us see the mode of action of different substances derived from plants not heretofore known or recognized. These substances are the plant proteins, vitamines, lipoids, etc. These substances are bio-chemic enzymes and catalysts, accelerating some well defined characteristic reactions. Some of these enzymes act as oxidizing agents and are successfully engaged to correct the disturbed metabolism caused by low oxidation. Others act as reducing agents and are employed accordingly, but the majority act as hydrolyzing mediums and have enormous importance in hydrolyzing different

foreign substances, foreign proteins and invading micro-organisms. The biochemic enzymes of plant origin are essentially special and are effective bodies of well determined structure and configuration, bodies of affinity.

It is necessary to bring to your attention the fact that all bacterial substances are of great chemical affinity to each other and are so *in vivo* as well as *in vitro,* and in consequence their enzymic action is bound down already *in vitro* to the extent that they are absolutely inactive and only the very small remaining unbound, free, non-specific proteins incorporated in these products act beneficially. So we must understand that through their administration we add an additional burden to the system, and the small benefit derived does not justify their use, taking into consideration the danger of anaphylaxis and possible secondary infection. Furthermore, the bacterial enzymes act indefinitely and even if we should admit their problematical action, after overcoming the infection they would still continue their antagonistic work and, where they were beneficial before, they would become extremely dangerous and destructive afterwards. Even if we should accept the arguments of the advocates of vaccine and toxine therapy we have to say that through animal and bacterial substances we render the body cells gradually passive toward infection, and in consequence these cells lose their inherent defensive power to a great extent, and where we immunize the patient with animal and bacterial products against one infection we render the patient more susceptible to infections which were before harmless to him.

The plant enzymes have an enormous affinity toward the co-enzymes of the bacteria, virulins, and have no affinity toward normal body cells. Therefore through their introduction into the affected body we introduce an agent which will immediately search for its affinity, for the virulins, and at the moment that they come in contact a bio-chemical association takes place, each neutralizing the other and rendering each other inactive. This is a continuous action which depends on the quantity of the two antagonistic agents present. You will therefore appreciate the fact that plant enzymes have to be introduced into the system in a quantity sufficient to counteract the infection. After the plant enzymes perform their duty they will be destroyed and eliminated and are unlike the bacterial enzymes introduced into the system for a similar purpose. As the action of the plant enzymes is a biochemic one, a dissociation and an association, their introduction into the system will call out a general reaction, and this is the reason that we have to introduce different antigens for a prolonged period in small quantities to avoid unnecessary and unpleasant reactions, both generally and locally, which would be caused by excessive dose.

As the time limit will not permit me to enter into a more detailed description of the biochemic action of our anti-virulins, you will allow me before I enter into a discussion of the fundamental action of the non-specific proteins to present a summary regarding the anti-virulins:

1. Anti-virulins of plant origin introduced into the living body cause a general reaction, mild in character and of no dangerous consequence.

2. Anti-virulins are extremely sensitive to heat, light, alcohol and inorganic acids.

3. Anti-virulins are rendered inactive by precipitation through alcohol, ammonia, zinc sulphate or inorganic acids.

4. The most important action of anti-virulins upon invading micro-organisms is a neutralizing one where the virulins can not prevent phagocytosis and are not in a position to degenerate the normal cells for their own purpose.

Once the anti-virulins commence their complex biochemic action, favorable to life, the nonspecific proteins, which usually are co-enzymes to the anti-virulins, are in a state to commence exercising their influence upon the cytogenic mechanism, so that the blood-forming organs hitherto reduced by the invading organisms to a state of passive resistance will renew their activity. The result of this activity is the marked elevation in the number of white and red blood cells, the real and active supporters of our natural resistance against infection.

Before going further I wish to direct your attention to the fact that Metchnikoff and Wright have demonstrated that certain white blood cells (the phagocytes) have the power to attack and split all foreign proteins of higher specific gravity than the normal proteins of the body and so have the power to split the invading micro-organisms. We know that the phagocytes are the only ameba-like cells in the system which have the power of taking foreign proteins into their own bodies intracellularly and subject these foreign proteins and bacteria to complete assimilation. This biochemic and physiologic action means that the re-enforced phagocytes will arrest every micro-organism with which they come in contact and split the same into particles, into smaller molecules, into peptones and toxins. When micro-organisms are split into particles they do not have any further power of reproduction. Therefore their destructive influence is minimized.

The phagocytes by their amebic character, as stated above, will throw the digested micro-organism out of their own bodies by osmotic pressure into the middle of myriads of red blood cells. Some of the phagocytes, however, by continuous and enforced digestion of the micro-organism will undergo fatty degeneration and succumb, giving the substance known as pus.

Going back to the point where the phagocytes discharge the split products of their activity, the peptones and toxins, into the masses of red blood cells, I would call your attention to the fact that we have arrived at a new point of view as regards the activity of the red blood cells. Hitherto the only function ascribed to the red blood cells has been that of conveying oxygen to the tissues and carbon dioxide from the lungs, where the interchange of gases takes place. Scientific investigators have recently come to the conclusion that since the red cells are living protoplasm they must have further enzymic action, but all discussion has stopped at this point.

I direct your attention to my view of the further biological action of the red cells in their conduct toward peptones and toxins. This view of the

activity of the red cells was in a measure forecast by the work of Abderhalden. He employed the Buchner method in his experimentation, searching for the selective affinity of various enzymes of different tissues. He found that every tissue contains different enzymes which have the power to hydrolyze one or more peptones or toxins. He furthermore found that the red cells hydrolyze the most complete polypeptids, which are not hydrolyzed by any other cells.

Abderhalden's experiments were not made for the purpose of proving the share red cells take in immunization, but rather to show the most characteristic action of these cells. He has abundantly proven, however, that red blood cells have the power of taking up split products of foreign proteins and cleaving the same into smaller molecules, into amino-acids, *i. e.*, which means that the peptones or toxins thrown out from the phagocytes are taken up by the red blood cells and are further split into smaller molecules, into amino-acids. This is a very intricate biochemical action in which action the elements of water are fixed at the point of least resistance and liberate the most easily detected amino-acids. This action continues more and more until the toxins are cleaved into a simple molecular group, corresponding to the constitution of the amino-acids. The red blood cells, however, not being of amebic character, are not in position to release the newly formed amino-acids, but are carried by the circulation to the liver. This organ, being the only one with the power to retain three times as much amino-acids as any other organ, will retain the red blood cells with their contents for a certain time. The enzymes discharged by the liver cells will continue the splitting of the small amino-acid molecules into ammonia and fatty acids, which will be eliminated from the system, partly as urates, partly as bile. The red blood cells, however, are killed in large numbers in the liver and their dead corpuscles may be found in the body discharge. I want to say that the red blood cells are in position to perform the above mentioned enzymic action on account of their nuclein protein content, which is not necessary for the mere purpose of carrying gases.

Before I summarize the action of anti-virulins, white and red blood cells, I want to bring to your kind attention the fact that through the introduction of water soluble plant vitamines we bring the tissues of the body nearly to a normal catalase content, so they are in position to defend themselves against the smaller toxin molecules which escaped the vigilance of the red cells and in consequence the tissues are in a better position to resist degeneration.

Another subject of immense importance in combating the diseases of disturbed metabolism is the subject of lipoids, which supply the tissues with different substances not otherwise provided on account of faulty metabolism. These lipoids prevent atrophy of the tissues. This subject is so extensive that I shall be compelled to bring it to your attention either in print or on another occasion.

I shall summarize the action of the anti-virulins, non-specific proteins, vitamines and lipoids. The antivirulins neutralize the destructive enzymic

action of the co-enzymes of the invading micro-organism. In doing so they prevent the destruction of the normal body cells on one hand and liberate the phagocytes, rendered inactive by the virulins, making possible the action of the non-specific proteins to stimulate the blood forming organs to a higher activity in producing white and red blood cells. The phagocytes produced by this increased activity deal with the whole foreign protein molecules and the red cells deal with the split products of phagocytic protoplasm activities.

The leucocytes therefore supplement the work of the digestive tract, the erythrocytes supplement the work of the leucocytes and relieve the body cells of the need of self protection against smaller toxin molecules. The vitamines elevate the splitting power of body cells sufficiently to protect the body against any toxins which may have escaped the activity of the red blood cells.

In this dissertation, gentlemen, I have tried to give you in a nutshell the mode of action of different plant enzymes which act individually, but whose united action for a prolonged time is beneficial.

Gentlemen, I thank you again for this opportunity to present my theories on the therapeutic action of the non-specific proteins of vegetable origin.

* * *

Remarks by Prof. J. U. Lloyd.

May I not crave the privilege of offering a few remarks concerning the admirable paper contributed last evening by my fellow-townsman, Mr. Chas. G. Merrell, and the remarks following by Dr. A. S. Horovitz? This privilege I ask not only because I appreciate the importance of the problem, although I am sadly inadequate to comprehend the technical field occupied by Dr. Horovitz, but because I feel that this society can not afford to permit a paper exhibiting so much research as does that of Mr. Merrell, as well as one so intrinsically important, to pass without discussion.

Mr. Merrell has brought home to us the fact that the drug supply of America is undergoing a change, has indeed, within three decades, undergone a revolution. Perhaps we can not better illustrate the problem of pharmacy manipulation than by a repetition of the homely but expressive old adage that has passed down the centuries on how to make a rabbit stew: "First, *catch your rabbit.*"

When the Eclectic fathers came first to the Middle West it was comparatively a primitive land. Near and far, hill and valley were covered by woods and forests. Underbrush and saplings shaded every nook and corner. Within the shadows all herbage throve luxuriantly. The physician or pharmacist had but to step outside his door to meet the wealth the wilderness had stored, to pick the medicinal leaf, or dig the root desired. Doctors were then not only botanists, they were as a rule pharmaceutical manipulators in such directions as common tinctures, syrups, etc. The mortar and pestle were to them necessities, alcohol was cheap and abundant, and crude drugs were scarcely a factor because they could be obtained from home collectors at an expense of but a few cents a pound.

The question now is not "What must I pay for this or that drug?" but "Where can I get it?" Not "What is it worth a *pound?*" but "What is its *quality?*" No longer can we order a supply of freshly dug or gathered material from the field about our doors, to be delivered immediately. To get this drug, we must perhaps go far north; to get that one, we must go still farther south. And alas! Some are scarcely to be obtained anywhere at any price. If any who listen to these words care to verify the facts go to your home druggist; try to purchase, *one pound only,* of each of the crude drugs used in making your standard remedies. Note the price of the commercial crude drug, if it is to be found at all. And as regards drugs from foreign shores famine stares us in the face—famine even of the scum and refuse now too often offered, to the discrediting of the true drugs desired.

Where will this thing end? Bold must be the prophet who would attempt an answer. Not alone was I in accepting that settled times would soon again prevail after the war was over. But instead of coming back to former conditions we find increasing unrest at home with chaos abroad. Wages ever climb upward to meet the ever upward rise in living costs, which in turn climb again upward to cover the price of man's increasing salary. In the scramble, those who once were content to dig roots and gather herbs are lost to sight. Vainly do we search for men or women to scrape from the forest tree one pound of the American *sticta.* Nor can we blame these people. A day's work or more would that pound represent. The wage opportunity is double the cost of the finished alcoholic representative of five years ago.

Nor are the collectors of old now content to live in seclusion as once they did. They seek the city, and in a single room a family groups itself, with less food and clothing than formerly, with no apparent desire for the freedom of the forest or the home delights of other days. The lights of the town, the lure of the "movie," the fallacies of discontent, prevail.

Think not that this is a pessimistic presentation of a hypothetical something yet to come. Think not that this view of what we have to meet today is a sombre exaggeration. The crisis may not even yet be upon us. The beginning of the end may lie in the distant future.

So it is, my friends, that I bid you welcome the address of Mr. Merrell, whose worthy father and celebrated grandfather I honored, and whose lives, cast in fraternal lines, give him the privilege of speaking by authority. He brings to us a ray of hope in that the government of the United States has, none too soon, taken heed of conditions. He shows us how a start has been made, and I beg one and all to be patient in the hope that we who must need meet present conditions make the best of affairs, looking for brighter times in the future for those whose duty it is to supply physicians with authentic pharmaceutical preparations of plants.

Hand in hand with Mr. Merrell came Dr. Horovitz, whose address, following that of Mr. Merrell, claimed the attention of our members. I am not versed in either the pathological or the physiological fields he has in-

vaded. Frankly, I will say that as a child—as a student—I listen to those whose investigations lie in what I accept to be explorations in the ultra-application of remedial agents to perplexing morbid conditions. But I can, with propriety, express my great interest in Dr. Horovitz's application of one idea, long held by me, viz., that *condition* of material dominates *mass* of material in its impressive power; that the "still, small voice" in medicine may serve better than the whirlwind; that the influence of a kindly agent may sometimes accomplish where the blow of a toxine fails; that in both pharmaceutical directions and in therapeutic applications so much is yet to be learned as to bid him beware who would be a critic of others. The outside of everything is bigger than the inside, and Dr. Horovitz has given us an address that, lying mainly outside my field, I can not discuss other than to thank him for his complimentary reference to my efforts in colloidal plant research.

SEXUAL NEUROSES.

Theodore Davis Adlerman, M.D., Brooklyn, N. Y.

In the etiology of nervous and mental diseases sexual neuroses play a most important part. It is really remarkable to note the influence played by ever so slight affections of the sexual organs on many men and women, resulting even in the most grave nervous diseases. The cases are but seldom understood by the general practitioner, who either pays very little attention to them or else exaggerates their importance to such a degree that he drives these patients into the hands of the advertising charlatans, who just lay in wait for such cases.

It is my intention to take up here a few of the neuroses which may be met with in every day practice. I do not know who it was that made the remark that "nearly one-fifth of the world carries its varicocele with it and never bothers about it," but he ought to have added that there are many individuals who make a monster mountain out of this little affliction. Who of us does not get that peculiar young man, with the "life gone out forever" look on him, to come into our office desiring to know if there is still a chance left for him? Will he have to submit to a very serious operation, and has he one chance in a hundred? "Doctor, please do not keep anything from me, I can stand the shock." You proceed to examine the case, expecting to find at least some mental trouble or a brain tumor, and you discover a varicocele. The mind of the patient is in a state of agitation, and unless you assume complete control of the case and impress him enough so that he understands the real situation, and unless he submits to your will power so that you have his complete confidence, this patient will commence to have the most terrific (?) the most awful (?) symptoms, as he will call them, and in time will develop into a most beautiful case of neurasthenia.

If this case should then happen to fall into the hands of some advertising quack do you wonder that some of them (I mean the patients, and not the

quacks) finally land in some insane asylum; and yet, with all this, can we conscientiously place varicocele as a factor in producing insanity?

Let me impress upon you, gentlemen, that sexual neuroses, no matter how slight, may even drive your case to suicide, all which can be prevented by proper handling of these patients.

Volumes upon volumes have been written by men of eminence in the profession upon the influence exerted by a long prepuce in the male. I have read learned (perhaps scientific is a better expression) treatises of the various reflexes and organs and conditions produced and affected by a long prepuce. Kidneys, digestion, bowels, the mind, all, they claim, are influenced by a long prepuce. What would our orificial surgeons do without the long prepuce? It would take away one of the main sources of their income and would deprive them of one of their very best friends.

I am not going to deny that there are cases in which circumcision should be performed, but I do claim that there are hundreds, nay thousands, of cases in which the unfortunate long prepuce is neither adherent nor constricted, and it should be let alone and not sacrificed on the altar of orificialism. I do not know what, but "something" does, once in a while, call the attention of a young man to his prepuce and he will consult you. He will tell you of most peculiar sensations, of a very frequent desire to urinate, of some insomnia, and of some hysterical feelings; in fact he will describe feelings which will even set you to thinking. As a matter of fact the prepuce has nothing whatever to do with his condition and the condition as presented is purely psychological. Do not at once advise circumcision unless it is really necessary by the phase presented, and then, if you do not perform the little operation yourself, get a good competent surgeon, and not an amateur orificial surgeon who may be treating scarlet fever or measles at the same time. It is funny why so-called orificial surgeons do general practice!

Most of these cases, however, can be, and should be, treated mentally without the sacrifice of the prepuce. Let us not forget that millions and millions of individuals seem to live happily without surgical intervention, and, still more, let us not forget the fact that circumcision in many cases in the adult produces nervous conditions which are just as bad as some of those that are supposed to be due to that suffering long prepuce.

Sexual impotence. What a multitude of sins and ignorance is covered by this term? Young men will come to your office, nervous, pale, forlorn, sad, with that "I do not know what happened" expression. Others are pictures of most profound despair. The story is the same. They can not perform the sexual act. The patient has lost his appetite worrying about his condition; he does not sleep, he is quite sure that he is incurable and only came to you to hear what you have to say, not that it matters much. He knows he inherited some serious nervous trouble; he reads with a great deal of interest all sorts of questionable literature issued by those benfaectors of humanity, the advertising quacks; his mind is at all times concentrated on his

sexual organs, and unless you know how to grasp this case, unless you know how to get the confidence of your patient, and unless you understand the case in all its phases this case will also terminate very badly, and yet most of these cases are curable.

Do not for a minute mix these cases with cases of organic impotence, which must be handled in an entirely different manner. In the first above mentioned category the mind and mental therapeutics play a most important part. Obsessions are always present in these cases, and the neurotic character in all of them is so prominent that you do not have to be a nerve specialist to be able to diagnose them, though I must say that it requires skill to dispel and to allay for good the many imaginary terrors associated with psychologic, or so-called psychic, impotence.

There can be no question whatever that some cases of sexual impotence are really the first premonitory signs of certain very serious nervous diseases that are about to manifest themselves in the individual. It may be the first sign of a paralytic dementia, or of a tabes dorsalis, or of a spinal myelitis of a syphilitic origin, or of a spinal meningitis, of a diabetes, of a paraplegia. Organic impotence will present many features which are not found in the psychic cases, and many of the organic cases are either associated with syphilis, or may be produced by masturbation, gonorrhea, sexual excesses, or by such drugs as opium, morphine, alcohol, cocaine or chloral. Certain malformations, such as adhesions of the penis to the scrotum, incurvation of the penis, will all produce impotence, with some nervous manifestations. Neurasthenia will often develop in these cases, and will require the most persistent treatment.

Another very good friend of ours, one that produces many patients, is a nocturnal emission. The patient is, as a rule, a young man. He will have an emission; will become somewhat worried when the nocturnal visitor has repeated its appearance. The patient will lose some sleep. He will commence to read up the questionable literature which his friends are only too willing to place in his hands. He will get abnormal notions as to the real danger of this condition, and he will then visit his doctor. Unless these cases are properly handled, and the patient is made to understand what he may really expect in his condition, melancholia will follow. In some cases the nocturnal emissions may have to be controlled at once; while in others, no particular harm is done, even if they continue.

Nocturnal emissions may be associated with erotic dreams, or with a daily mental masturbation—a masturbation in which the patient's mind is constantly dwelling on the fair sex in the most erotic pictures. These cases can not be cured with medicine alone, and psychoanalysis and mental therapeutics must be employed to accomplish results.

Of late years, with the study of the sex question, with the study of sex hygiene, with the study of sex problems, we had a great increase of nervous and mental diseases, especially of the so-called sexual nervous and sexual mental troubles. Sex literature (if literature is the proper name to give to

this particular trash), thrown around right and left, awakens sexual feelings, producing neurotic conditions in which erotism is prominent. I consider many of the so-called authorites who deal with sex and sex problems as neurotic individuals, who possess a diseased mind. The so-called "sexual question," as now pushed among the young, has produced more patients for my office than any other condition that I know of.

The peculiar melancholia which is produced by nocturnal emissions is also often found in cases of masturbation. Who of you did not have patients in his office who were sure that all their troubles were due to masturbation, which they have practiced at some time in their lives? These patients are sure that you can not help them. Yes, they know that their nervous constitution is ruined, and they will eventually surely land in a mad house.

Masturbation may, and may not, be harmful; it depends entirely on the case and on the individual. And I will say here that excessive sexual intercourse will often produce even worse results than masturbation.

I have seen cases of complete exhaustion, insomnia, headaches, nervous debility, melancholia, and what not, all produced by excessive coitus, exactly similar to conditions as found in some masturbators. Both of these conditions, and the patients presenting them, must be handled with care and understanding of the peculiar psychology underlying each and every case. While I am willing to admit that masturbation may produce some mental troubles in the young, yet it is not the act in itself that produces the mental disease, as in nearly all of these cases there are no after effects. It is the extreme indulgence in the act, which may counterbalance the already weak nervous constitution and produce nervous and mental troubles. Neuroses which are due to masturbation are very much worse in girls than in boys, and require a great deal of patience in handling these cases to a proper conclusion.

In many cases of self abuse, or masturbation, after you have succeeded in breaking up the habit, a new trouble will present itself for your consideration. The patient will suffer from nocturnal emissions as the seminal vesicles have a tendency to evacuate themselves. The patient will again come to you in despair, with even more depression than before; and it is at this stage that your utmost efforts will be required to overcome the patient's peculiar ideas, that the sins of his early years can be overlooked, and that perdition is not the only thing that is left for him.

Impotency, which is found in many of these cases, is very pronounced; and in women the most incorrigible psychoneurotic manifestations appear, which may even last through her life. With female masturbators, the conditions, after you have overcome the masturbation habit, will present an entirely new phase. The desire for the embrace, for caressing and petting, or any of the other many little acts which are all the strong expressions of love, are absent, and the woman is unable to respond to normal psychic and physiologic reactions which attend sexual relations. These females can not,

and do not, excite the normal desire in man, and in her presence the male becomes impotent, which explains the peculiar condition of a man being impotent with one woman and yet being able to perform the sexual act with another woman.

Some time ago, at the request of the Supreme Court in my state, I examined a man as described above. He was being sued for annulment of his marriage on the ground of impotency. He was not able to perform the sexual act, yet he was perfectly normal in every way; but he was impotent as far as his wife was concerned. An examination of the woman revealed the true condition of the case, revealing a female masturbator of the highest degree. I must say here one more word. Temporary masturbation and effects of the same must not be mixed up with results that are apt to follow habitual masturbation. We all know that all boys have masturbated at some periods of their life, and without any bad effects, depending entirely upon the stability of their nervous systems.

To treat all of the above cases, one must possess a thorough knowledge of the psychology of the sexual instinct.

I believe this article would not be complete were I not to mention sexual perversions, which are considered by some neurologists as different from sexual neuroses, but which are really a sexual neurosis of a special form. I could write a bookful about sexual perversions; and, some day, maybe I will. It will suffice, however, for the present to say here that most sexual perversions are due to an abnormal instinctive tendency.

As little as I admire Freund and his theories, yet I must admit that he has brought forth an array of facts which show plainly that obstacles of a normal sexual life are very frequently the cause of violent disturbances of the mind, and that mental disorders may follow sexual neuroses.

DISCUSSION.

Dr. J. Earl Holman, Indianapolis: What is the treatment for masturbation in girl children from 3½ years up?

In regard to circumcision, it seems to me that too many of our obstretricians fail to take care of the foreskin at the time of birth. I always instruct the mother and nurse how to follow up the treatment, so there may not be a constriction of the foreskin a month or six weeks after the birth. I agree with the doctor on the point of circumcision—I do not think it is necessary to be a specialist to be able to do one.

Regarding the varicocele and hypertrophied testicle, as indicated by tenderness in the back, I wonder if the doctors ever found what they thought was a one-sided lumbago? You will find if you put a brace on and raise the varicocele you will get rid of your lumbago.

Dr. B. E. Dawson, Kansas City, Mo.: I would like to insist that, in orificial surgery, circumcision is only a very small part of our surgery. A great many cases do not need circumcision; but you will find a small meatus, rectal fissures and pin worms, and papilla pockets. All these organs are supplied from the same sympathetic nerve fibers, with reflexes from one to the other. Where there is nerve impingement anywhere, you will find these disastrous reflexes follow.

Dr. T. D. Adlerman: The treatment of masturbation in the adult is

essentially mental. For the treatment in the child, there is only one drug that meets the case, and that is conium maculatum. The adult masturbator, unless you use your psychic therapeutics, you will never cure.

I am obliged to Dr. Dawson for telling me what orificial surgery consists of. I did not know. I have been coming to these meetings year after year, hearing the same doctors tell about the results that have been obtained from orificial surgery; but we are not seeing these results. If Dr. Dawson can cure insanity, he is losing time in his town. If he will come to New York, I will place a large hospital, with 5,000 cases, at his disposal, and let him cure them.

COLIC THAT IS NOT.

H. C. Smith, M.D., Glendale, Calif.

The symptomatology of that bane of infancy, colic, as recited to us by staid old college professors, busy professional brethren, encyclopedical nurses and foxy grandmas, is clear, simple, explicit and complete, and the diagnosis, of necessity, unmistakably and invariably specific.

For many years I, in my guileless and inefficient way, watched the kiddies kick and twist, squirm and squall, accepted the aforesaid specific diagnosis, and methodically doped the poor kids into quietude and submission to our unquestionable findings. I expect to get forgiveness, as I did not know any better; and, besides, I "meant well."

In my callow youth in the practice of medicine I doped a poor little youngster with everything from paregoric—up and down—for a persistent "colic." I administered dioscorea, when he reared back upon his dignity and pouched like a pouter pigeon; gave him colocynth when he bowed down in anguish, and nux whenever he allowed his hand to wander in the general direction of his navel. His rations were trimmed to emergency quantities, changed about, and predigested, all to no effect. I finally came to the conclusion it was largely temper; but his ear drum finally ruptured, probably saved his life, and cured his "colic."

Watching a near nurse manhandle an infant in a cold room, and the consequent sequelæ, created the first flash of intelligence along this line in my benighted mind. I was not surprised that said infant changed from a mottled blue color to a beautiful lobster red, and that he "raised up his voice in lamentation" in consequence of the change. The would-be nurse promptly diagnosed the case, and doped accordingly, and unsuccessfully, until the parents became alarmed and called me in. This baby's "colic" was evidenced by high temperature, hot, dry, red skin, scanty urine and great restlessness. Pressure over the kidney region caused pain, which elicited prompt flinching and crying. Treatment directed to the child's kidneys brought prompt relief from "colic."

Another child was restless and a fitful sleeper, and suffered from slight indigestion and colicky pains, more especially when the bowels moved. Careful examination showed a soft, relaxed abdomen, without tenderness, but a very small preputial opening, reddened and swollen. A temporary

stretching and loosening of the prepuce, followed by a circumcision on the ninth day, cured all his symptoms of colic.

The superintendent of the local hospital called me into the nursery one day, and said the babe of one of my patients had had considerable colic the past three or four days, and now had considerable fever. I observed the actions of the child for a few minutes and examined its abdomen. I noticed that it twisted its face and neck frequently, and gagged occasionally. Examination of the throat revealed an acute tonsilitis, which was immediately treated, and I shortly heard no more about the "colic."

The "colics" that are the result of an excess of pins, starch, urine and heat in the child's clothing, and which are cured by a little attention to the babes' personal hygiene, are all too common and too familiar to all general practitioners, obstetricians and pediatrists to permit the use of space in their chronicling.

Legislation for Influenza Control.

The first step in the way of obtaining legislation to combat a recurrence of the influenza epidemic has been taken in Congress by the introduction of a measure by Congressman Eugene Black, of Texas. The bill provides an appropriation of $500,000 for the investigation of the causes, modes of transmission, prevention and cure of influenza, pneumonia and allied diseases; and the fund is also made available for combating these diseases. This sum is made available until July 1, 1922. The Public Health Service is charged with the expenditure and administration of this work. The Surgeon General of the Public Health Service is authorized to employ such medical assistance and nurses as may be necessary, fixing their compensation at not greater than the amounts paid other similar employees of the Public Health Service. The Surgeon General is directed to file an itemized list of expenditures with Congress, December 1 of each year. A preamble to the measure declares that the influenza epidemic caused 500,000 deaths in the United States, that influenza and pneumonia cause one-tenth of all the deaths in the United States, that medical science is not yet in possession of complete data regarding these diseases, and that they are of grave social concern to the United States. The bill is No. 7293, and was referred to the House Committee on Appropriations, of which Congressman James W. Good, of Iowa, is chairman, for action.

Potassium Chlorate in Throat Diseases.

Clinical experience of some years ago was not at fault in ascribing activity to potassium chlorate in septic throat diseases (*Med. Council*). Part of the ingested chlorate is excreted in the saliva, thus supplying an antiseptic for hours. Then, too, the presence of septic matter reduces the chlorate, liberating nascent oxygen.—***The Doctor.***

The National Eclectic Medical Association
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WILLIAM NELSON MUNDY, M.D. . . . . EDITOR.
FOREST, HARDIN COUNTY, OHIO.

J. K. SCUDDER, M.D. . . . . BUSINESS MANAGER.
CINCINNATI, OHIO.

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INAUGURAL.

In addressing the membership for the first time, I take this opportunity to thank you for the confidence reposed in me. There is much work, and hard work, before us, and I shall call upon you individually during the year for assistance. In order to equal our Chicago meeting, we must all work, and work hard. Self must be elimintaed, schisms forgotten, and all work for the common good—Eclectic medicine.

In the next issue I will announce the committees, and trust each one will respond, and respond promptly, to the request. We can only succeed when we work harmoniously and as a unit.

Let us make the Atlanta meeting the "best ever." COFFIN.

THE NATIONAL.

The 1919 meeting of the National Association has passed into history. It was one of the most harmonious and successful meetings we have attended. Under the direction of the president, Dr. Ellingwood, everything passed off smoothly and rapidly. There seemed to be no remission or let up on the scientific work.

The scientific part of the program was above the average, and the addresses of Professors Beal and East added materially to the work. Charles G. Merrill and Dr. Horowitz helped along with this portion of the program, and the contribution of the former of these two gentlemen was very instructive. It is not necessary to review the program, as the papers and discussions will appear in the QUARTERLY.

The Entertainment Committee was not lax in their work, as all who visited the tuberculosis sanitarium and listened to the clinical lecture of Dr.

Graves can well attest. This was preceded by an automobile ride through the boulevard system of Chicago, and was followed by a luncheon at the sanitarium. The exhibits were good; and especially interesting was the exhibit by the Health Department of Chicago.

We feared there would be no time for the lengthy program outlined by the president, but by persistent energetic work, and night sessions, it was completed on time. The president and his associates in Chicago are to be congratulated on their success.

We trust that the meeting in Atlanta, Ga., in 1920 will be equally successful. M.

THE FUTURE OF MEDICINE.

George V. Sheridan, executive secretary of the Ohio State Medical Association for six years, in his farewell remarks gives much food for thought. We wish that every physician could read it. It graphically sets forth and emphasizes the need for organization.

His own view is "that the need for a compact organization is greater, and will be greater as the laws and tendency of legislation become more paternalistic. Whilst the workmen's compensation act did not affect us all, but once the next logical step in paternalism is adopted, compulsory state health insurance, the physicians *must* organize.

"Once the states commence to experiment with the various forms of health insurance, the relation between the physician and patient changes. Now the physician renders the service, and the patient either does or does not pay the bill. Under the proposed laws, the physician renders the service; but his bill is rendered to the state, and the state arbitrarily fixes his compensation, as under the workmen's compensation law."

"So long," he says, "as the old relation existed, there was no particular need of organization to conduct collective bargaining. Immediately we have state health insurance, the future welfare of the profession, the maintenance of honest medical standards and the adequate protection of the sick public in the state will depend almost entirely upon the ability of the profession to organize, for the purpose of collective bargaining. When that time comes, if the physicians do not present a solid front and stand together in their demands for just standards and adequate remuneration, they will be caught between the two biggest forces in the state and crushed. Medical practice will be so lowered that eventually it will be impossible to practice medicine honestly and live.

"These two forces are represented by the employer and labor. The former endeavoring to keep the cost as low as possible; the latter, to demand the maximum of medical benefits. The third vital factor in the scheme, the physician," he says, "will be caught between the devil and the deep, blue sea." The one hopeful factor in the situation will be the organization, and the use of that power to control the situation.

Attention is called to the condition of the medical profession in England under the health insurance act passed in 1912, due, he says, to the lack of organization and the inability, or lack of desire, upon the part of the British Medical Association to properly exert the influence. They have seen their error, and are now endeavoring to mend or adjust the defect.

In the Charlotte *Medical Journal* I find an editorial entitled "Communizing the Medical Profession." The writer quotes Dr. Vincent, president of the Rockefeller Research Bureau, as saying: "Medicine, in the broad sense, is to be one of the co-operating bureaus of the Government." He sees the members of the profession as having lost all personal initiative; and he sees physicians and surgeons merely working a specified number of hours in a day, at a governmentally fixed price. He sees the physician having absolutely nothing to say as to whom he will attend, and also sees the patient having absolutely no choice as to what physician shall treat his troubles.

The writer analyzes the condition, and attributes much of it to the present socialistic craze, the lack of interest in public affairs by physicians, and a neglect of the duty in the past. "And now, looking at the matter," he says, "from the viewpoint of past neglected duties of this kind, one gets the impression that something is about to be handed out, because, to the mind of the mob, the medical profession is easy."

"The communistic idea, that seems almost sure to submerge the medical profession, has not grown up in a day. It is a sociologic plague, sure enough; but it has some biologic design, nevertheless."

"The world is topsy turvy, and this part of the world is as topsy as any other part of it. Just what the present mental condition of the world really means, one hardly dares hazard a guess; but the communistic idea is so dominant in this country that its study and sane solution is vital to the life of the medical profession, and, hence, vital to the life of the nation."

In my thirty years of activity in our state society, I have urged and urged organization, until I feel I have made myself obnoxious to many men. I have talked and written of paternalism and its danger to the profession until I have been called a "pencil pusher." Yet, all this time to no effect. Physicians are too self-complacent, too self-satisfied, and take no interest in the future of the profession. One should be as interested in the future welfare of the profession as in the present. Society's future welfare concerns all; so should our profession.

This tendency toward paternalism is further evidenced by the perusal of the three bills now pending in Congress for the organization of a Department of Public Health, centralizing all public health and hygienic work in the hands of a secretary, to be a member of the Cabinet. No one will deny that many of the activities of the nation and state ought to be centralized, for the double purpose of efficiency and economy. At present we have too many bureaus and commissions, often conflicting and duplicating in authority. An instance of the tendency is noted in the circular to-day received from the Industrial Commission, limiting the amount of attention and work

rendered a patient without special permission from the commission. This practically forestalls the labors of the physician, as well as his freedom of action. The commission employs, dictates his action, and arbitrarily fixes his compensation. Even the Harrison antinarcotic law makes the physician bear the odium of its administration.

I am heartily in favor of legislation having for its object the uplifting of mankind socially, morally and physically; but I firmly believe the profession bearing the brunt of this work, and which is most vitally interested in it, both from an economic and administrative stand, should be consulted in its enactment. As it now is, or has been, it has been left to theoretic sociologists, philanthropists, economists and unions.

There has been a steady encroachment upon the medical profession for years. There will be, unless the physicians organize and labor with that singleness of purpose that labor and other similar organizations do. We must organize, for our own salvation. Our troubles to-day are due to a lack of organization. When will the profession awake? Not until we do will we be able to stem the tide, or stop the conditions that are surely engulfing us. M.

QUACKERY.

If there is one thing that I detest and abhor in medicine, it is quackery and charlantry. Our state boards of examination and registration are presumed to punish those guilty of it. State and national laws have been enacted in an attempt to check it. These laws apply with equal force to men and medicine. Thus, it is illegal to state on proprietary medicine that they will cure what we usually regard as incurable diseases, such as Bright's disease, diabetes and tuberculosis. Yet, every physician with years of experience has seen cases of all these cured, or the process at least arrested and the patient given a new and long lease of life.

Unfortuntely, the profession is not entirely free from this disease. Reprehensible methods pursued in consultation in long and loud boastings as to cures, *innuendoes* cast upon the success of a colleague, are only mentioned to be condemned.

The medical profession is altruistic, learned, and should be concerned in the uplifting of mankind, socially, morally and physically. My ideal of what the profession should be is very high.

This editorial is the result of reading the following quotation from a board of health bulletin on diphtheria: "Practically every diphtheria death is due to negligence, either in failing to use antitoxin or in delaying its use until too late."

We believe, and know, the above to be false. The claim here put forth would put to shame even a traveling salesman, and, it seems to me, comes dangerously near to breaking the national law pertaining to false and fallacious claims on labels.

It is dangerous, because it puts a false sense of security in the *laity*, instilling the belief in them that antitoxin is an infallible and positive cure for all cases of diphtheria.

We all admit the usefulness of antitoxin, both as a prophylactic and remedy for diphtheria; but it appears to me that no one but a novice would dare to make such a wild claim as to its infallibility. We know that no one with a very wide experience in this dreaded disease would do so. Honesty in officials should be insisted upon with just as much force as in the physician. M.

ALL-TIME HEALTH OFFICERS.

The preceding editorial and recent experiences with infectious diseases and the difficulties incident to maintaining an efficient quarantine in rural districts have converted me to the idea of a county health officer.

The personnel of our rural health officials is often a farce. Frequently they are laborers, both illy paid and with but little or no conception of the nature of infectious diseases and the duties incident thereto.

If the Hughes bill is wisely administered, we feel it will not only inure to the benefit of the community, but will relieve the worry, care, and, in a measure, the responsibilities, of the physician.

Every one fully realizes the constant worry incident to the maintenance of an efficient quarantine. The constant tendency and appeal to lighten its burdens and to raise the embargo before, in the judgment of the physician, it should be. Several instances have come to the writer's notice where physicians have irretrievably lost families by maintaining a quarantine. Incidentally, we have known where parties were not isolated by physicians for fear of incurring the displeasure of the family.

We believe the whole-time health officer will obviate much of this condition, and lighten the burden of the physician, who seems to be the goat for much restrictive legislation.

Personally, we are not over-enthusiastic over much of our health legislation and medical laws. We believe it is being overworked by quasi-reformers and philanthropists looking for easy money from the public crib. Some that is good, or, rather, intended for good, is badly administered, and in no ways helps or assists the condition of the poor, for whom these laws should be enacted.

Preventive medicine is making great strides, and our health laws, to be effective, ought to be administered by a responsible head.

We have too many commissions, too many bureaus, too many boards, whose duties conflict. This criticism applies not only to the state, but to the nation as well. We should have retrenchment. M.

NEWS AND NOTES.

Arizona.

Dr. George F. Fuller is located at Wilcox.

California.

Dr. Alfred J. Scott, Los Angeles, has been appointed a member of the State Board of Medical Examiners, succeeding Dr. Henry V. Brown, Los Angeles, term expired. Dr. Cyrus J. Gaddis, Oakland, has been appointed a member of the State Board of Medical Examiners, to succeed Dr. Ernest Sisson, Oakland, resigned.

A bill which would grant full physician's license to persons now practicing Osteopathy in California was vetoed recently by Governor Stephens.

Florida.

The Eclectic Society met in Jacksonville, and a good meeting is reported. Dr. David Saxton, of Tampa, was elected president, and G. A. Munch, of Tampa, secretary and treasurer.

May 28, the Governor vetoed an act passed by the Legislature to amend Section 1137 of the general statutes, providing for a State Board of Health tax. The causes for veto as stated are: That the bill does not provide sufficient revenue to meet the regular expense of the board; that the language of the act may limit the use of the funds derived so as to embarrass the work of the board; and, furthermore, the Governor does not believe the revenue to be derived under the terms of the bill will be sufficient for the maintenance and support of the work of the board.

Illinois.

The annual meeting of the Illinois Eclectic Medical Society was held in Chicago, June 15, 1919, the day preceding the National. The following officers were elected: President—Charles Woodward, Chicago; Vice-President—J. I. Doss, Milton; Secretary and Treasurer—W. J. Pollock, Chicago; Corresponding Secretary—Thomas Brunel, Alton. The next meeting will be held in Chicago, in May, 1920.

The Ohio, Indiana and Kentucky tristate meeting was so successful, Dr. Charles Woodward, secretary of the Illinois society, is endeavoring to arrange for a tristate meeting for Illinois, Wisconsin and Michigan. Those interested should write him at once. His address is 2529 Orchard Street, Chicago.

Indiana.

The Indiana State Board of Medical Registration and Examination has recently established reciprocal relations with Alabama, Georgia and Washington. Relations had previously been established with Arkansas, Colorado, District of Columbia, Illinois, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Utah, Vermont, Virginia, West

Virginia, Wisconsin and Wyoming. This makes thirty-four states with which Indiana now reciprocates in the matter of medical licensure.

Kentucky.

The Kentucky State Board of Health has adopted, as a requirement for application for licensure, two years of premedical work. This rule becomes effective in 1922.

Dr. Harry T. Alexander has been discharged from the service and resumed his practice at Fulton.

Dr. Frank J. Moore is located with the Majestic Collieries Company at Majestic, Pike County.

New York.

Commissioner Herrick of the State Department of Narcotic Drug Control has notified 9,000 physicians, dentists and veterinarians who prescribe or administer habit-forming drugs that they must register or submit to criminal prosecution. July 1, only 8,000 dispensers out of a total of 17,000 had complied with the law. Commissioner Herrick announces that proceedings will be begun against evaders immediately. It is pointed out that two courses of action are open to the department. Licenses may be revoked or evaders may be prosecuted as violators of the public health law.

An organization, to be known as the New York Association for the Advancement of Medical Education and Medical Science, has adopted a constitution and by-laws, and has filed an application for incorporation with the Secretary of State at Albany. The project has as its aim the making of New York City a great medical center, which shall fill the place formerly occupied by Vienna and Berlin. The constitution of the association names as the four prime objects to be obtained: (1) to improve and amplify the methods of graduate and undergraduate teaching; (2) to perfect plans for utilizing the vast clinical material of the city for teaching purposes and to make use of teaching talent now unemployed; (3) to bring about a working affiliation of the medical schools, hospitals and laboratories, as well as the public health facilities of the city to the end that the best interests of medical education may be conserved; (4) to initiate the establishment of a medical education foundation in New York City whereby funds may be secured to meet the financial requirements of all forms of medical education and investigation. There will be two classes of membership in the organization; one a general membership, including all physicians in good standing, teachers of auxiliary sciences, and investigators of problems related to medicine; the other a corporate membership of medical teachers and medical men with hospital appointments or affiliations. The corporate membership is limited by the constitution to not more than 150. A nation-wide campaign to raise $50,000,000 with which to finance the project will be started immediately. The officers of the association are: president, Dr. Wendell C. Phillips; first vice-president, Dr. George David Stewart; second vice-president, Dr. Glentworth R. Butler, Brooklyn; secretary, Dr. Haven Emerson; treasurer, Dr. Arthur F. Chace; trustees, Col. Charles H. Peck, Dr. William Francis

Campbell, Brooklyn; Dr. John A. Hartwell, Dr. Frederick Tilney, Dr. Otto von Huffman, Dr. Adrian V. Lambert, Dr. Samuel Brown, Dr. James Alexander Miller and Dr. George W. Kosmak, all of New York City.

Summonses for more than 8,000 physicians, dentists, druggists and veterinarians authorized to dispense narcotic drugs, who failed to register with the State Department of Narcotic Drug Control on or before July 1, as required by law, are being issued. Violation of this law is a misdemeanor punishable by revocation of license and other penalties.

New Jersey.

Dr. Sophia Levinson Halperon has opened an office at 346 Brown Street, Union Hill.

Ohio.

Dr. W. E. Postle has associated himself with the Glenrest Sanitarium at 332 E. State Street, Columbus. He formerly conducted the Shepard Sanitarium for many years.

Dr. J. G. Sherman has moved from Allerton to Greenbush, Mass.

Dr. W. P. Brown has removed from Moorfield to 505 Wyoming Avenue, Lockland.

Dr. Lot H. Hughes, for twenty-five years local surgeon of the Pennsylvania system at Denison, has resigned, and has been succeeded by Dr. Edmund A. Wolfe.

Dr. Albert Schwartz has opened an office at 1638 Vine Street, Cincinnati, and will devote his time to diseases of children.

Dr. Fred M. Bantum has located at Brinkhaven.

Dr. Emmett K. Thomas was recently married at Lima, and is now located at 2843 Lorain Avenue, Cleveland.

Ohio State Medical Board—

The regular quarterly meeting was held in Columbus June 30 and July 31, all members being present. The result of the June examination was announced, 124 physicians passing, three of them being entitled to 5 per cent. for every five years of practice, which gave them a passing average; 6 out of 16 Osteopaths failed; 9 midwives, 2 masseurs and 3 Chiropodists passed. Forty-two reciprocity applications were granted, as follows, licensed after examination:

L. Adams, Columbia '18, N. Y. '13, intended residence, Bucyrus; H. J. Bollinger, Johns Hopkins '18, Md. '18, Toledo; O. A. Caldwell, Ind. Univ. '10, Ind. '10, Akron; M. B. Cohen, Univ. Louisville '15, Ky. '15, Ashland; S. B. Conger, Cornell '18, N. Y. '18, Akron; W. M. Dembrow, Med. Col. Va. '18, Va. '18, Cleveland; F. W. Dixon, Univ. Louisville '15, Ky. '15, Akron; G. S. Dunbar, Univ. Louisville '15, Ky. '15, Cleveland; J. R. Dundon, Rush Med. Col. '19, Ills. '18, Akron; E. W. Fell, Northwestern Univ. '03, Ills. '03, Cincinnati; I. C. W. Fling, Univ. Louisville '07, W. Va. '07, not decided; E. G. Galbraith, Univ. Mich. '16, Mich. '16, Toledo; V. J. Gallagher, St. Louis Univ. '18, Mo. '18, Cleveland; H. M. Goodyear, Northwestern Univ. '15, Ills. '15, Cincinnati; L. H. Hayhurst, Univ. Louisville '10, W. Va. '10, Beverly; E. H. Hedges, St. Louis Univ. '18, Mo. '18, Lima;

B. S. Kofford, Univ. Buffalo '17, N. Y. '18, Youngstown; J. A. Kramer, Univ. Louisville '08, Ind. '08, Columbus; W. T. Lowry, Univ. Pa. '11, Penn. '11, Trumbull County; K. E. McCammey, Univ. Md. '16, Md. '17, Toledo; W. C. McCord, West Penn. M. C. '05, Penn. '05, Columbiana; U. G. B. Martin, Howard M. C. '08, D. C. '09, Toledo; C. J. Mills, Unity, Ills. P. & S. '09, Ills. '09, Greenville; J. G. Murfin, Univ. Pa. '02, Pa. '02, Portsmouth; M. W. Myers, Univ. Md. '15, Md. '16, Youngstown; Elizabeth Morgan-Overhulse, Eclectic Med. C. '18, Ky. '18, Holgate; H. L. Perlis, Detroit Col. of M. & S. '19, Mich. '19, Toledo; E. Pisani, Royal Univ. Palermo, Italy '02, Mich. '12, Youngstown; M. H. Pulskamp, St. Louis Univ. '18, Mo. '18, Lima; C. Scofield, Univ. Pittsburgh '11, Penn. '11, Struthers; H. C. Stevens, Rush Med. Col. '14, Ills. '14, Elyria; A. W. White, Univ. Louisville '16, Ky. '16, Hamilton; P. A. Zinkham, Georgetown C. of M. '12, D. C. '14, Ravenna.

Two reciprocity applications were rejected.

The following reciprocity applications were granted on the basis of previous licensure on diploma:

I. H. Dillon, Univ. Iowa '98, Nebr. '98, intended residence, Bucyrus; H. H. Hays, Ohio Med. College '79, Ky. '93, Hamilton; W. S. Reece, Louisville Med. Col. '86, W. Va. '86, Akron; G. M. Speck, Jefferson M. C. '88, Penn. '96, Dennison; W. A. Shannon, Jefferson M. C. '92, Penn. '92, Niles; Fanny R. Stees, Woman's M. C. '13, Penn. '13, Akron.

One similar reciprocity application was rejected, two were postponed for further consideration. Three cult applications on waiver were postponed, one rejected and one will take the December examination in massage.

Mrs. Miller, R. N., of Newark, O., was appointed a member of the Nurses' Examining Committee.

The Loyola University School of Medicine was recognized for the year 1919. A modified reciprocity agreement with the state of Missouri was adopted. A similar Osteopathic reciprocity agreement was entered into with Wisconsin and rejected as to Missouri.

Three drugless healers and four physicians appeared before the board on charges of extravagant advertising.

One drug addict, whose certificate has been suspended, had his case continued.

A physician of Youngstown stated that he would suspend all kinds of circular advertising and his case was continued; a similar case of a physician from Akron.

Another physician, of Youngstown, will cease to employ an unlicensed physician, his previous employee having passed the recent June examination.

A Greek physician of Cleveland will cease fraudulent advertising in the Greek language. His case was continued pending good behavior.

Dr. H. E. Twitchell, of Hamilton, O., had his license revoked, as it was alleged that he had been convicted three times under the Harrison and state anti-narcotic laws.

Two convicted abortionists had their cases continued pending a new trial.

Sixty training schools of nursing were again recognized for one year to July 1, 1920. Three others were placed on probation to January 1, 1920. Recognition of two others was postponed pending improvements to the hospitals and courses of study. By request, recognition was discontinued to the training school of the Mt. Vernon Medical & Surgical Sanitarium.

Governor Cox appointed Thomas A. McCann, of Dayton, as a member of the Ohio State Medical Board for a period of six years, to March 18, 1925, to succeed Dr. L. E. Siemon, of Cleveland, as one of the two Homeo-

pathic members. At the same time he re-appointed Dr. John K. Scudder as one of the two Eclectic members, to succeed himself for a period of seven years to March 18, 1926. Dr. Scudder has previously served at three separate times for a period of seven years.

We are very glad to be able to state that all the graduates of the class of 1919 of the Eclectic Medical College who took the Ohio examination in June were successful in passing. They are as follows: Runk, Trittschuh, I. Black, Oleen Kitsmiller, Price, McLachlin, Rankin, Craig, Elliff, Ganzel, Olney, Seitters, Waterman, Clift, F. J. Moore, Coryell, Hoffer, P. Black' Dozer, Mrs. Thomas, Cress, Snell, Antonelli, V. R. Kitsmiller and Moorbrink.

South Dakota.

The Eclectics and Homeopaths held their conjoint session in Madison, May 21 and 22. A pleasant and profitable meeting is reported. W. I. Kinsley, of Miles, was elected president, and W. E. Daniels, secretary.

Dr. Baker has removed from Ramona to Lake Preston.

Tennessee.

Dr. Jas. Harvill Hite has returned to his practice at 921 Monroe Street, Nashville, after a year's service in the army.

Dr. Geo. M. Hite, Jr., is located at 510 Church Street, Nashville.

West Virginia.

Dr. L. E. Daugherty has been discharged from the service and has located at Davis, specializing in diseases of children.

MISCELLANEOUS.

Problems in Medical Education—Endowment of Medical Colleges.

In olden days, all medical educational institutions were what is now known as "jack-pot colleges," by which is meant that each year after paying all bills, the faculty divided among themselves what remained in the treasury. As medical colleges were then conducted, the financial results to those engaged in the business were profitable. This state of affairs has fortunately gone into the discard and will never return. In its place there has been built up a system of medical education in all things praiseworthy. Unfortunately, however, this system has proven to be very expensive, involving as it does numerous all-time teachers who must be paid living salaries and the limitation in the number of students in the different classes so that individual ward teaching and ward laboratory instruction become possible. Estimates of the cost of such a system seem to prove that the actual expense attendant upon the medical students' education amounts to somewhere between four and five hundred dollars per annum; while the student pays but from one to two hundred dollars per annum for his tuition. In the large, heavily endowed universities it is very evident that the system can be maintained, but in the small independent medical colleges it is evident that something must

be done in the way of endowments to make up the deficit. Inasmuch as medical students can not afford to pay the fees required to keep an institution on a strong financial basis, it is evident that the authorities in charge of medical colleges must get busy to secure endowments.

Among the large universities, the endowment problem is not a difficult one, as all of them number among their alumni numerous men of high financial prosperity. These do not hesitate to put their hands in their pockets liberally to supply the needs of their alma maters, and what is more, work actively in securing outside friends for their favorite institutions.

With medical colleges it is different. There are very few doctors who attain a state of wealth which will warrant them in giving large sums to their alma maters for endowment purposes. Moreover, the demands of medical practice are so exacting that physicians have but little time for awakening interest in the subject among the laity. They have no time for altruism. It is evident therefore, that we must look to the laity as active leaders.

The average layman is too apt to look upon requests for help as a mere question of providing expenses for vocational instruction of individuals who are unwilling to pay for it themselves. Perhaps this is true in vocations or professions other than that of medicine. Medical practitioners are assuming more and more importance in the affairs of the community. To them is now intrusted matters of public health and hygiene, upon them we depend in large part for the work attendant upon the efficiency of industrial communities. In the late war medical men were important factors in the operation of the selective service law, and subsequently became necessary in the care of our troops in trenches, battle fields and camps. All of the above are in addition to the old time duties of the doctor, namely, that of looking after the health of the individuals or communities. Is it not necessary, therefore, that the medical men shall be educated, and well educated at that? Medical colleges must be. We can not do without them. Is anything more needed to prove to the laity the importance of their financial assistance?

The friends of medical colleges must, therefore, interest all the charitably inclined in the endowment problem. One trouble in the past, and we believe it to be a very great one, is that those actively interested have been thinking too much of the gathering in of large sums of money. Let us think of the business principles of the Catholic church, which for ages has solicited contributions both large and small, not despising even the insignificant penny. These sums have been wisely taken care of, added to from time to time, and the world knows the result. Let those interested in college endowment take this lesson to heart and despise not the small sum, not forgetting in the meanwhile that large contributions are likewise gladly received. All alumni are not so favorably situated as to secure big money, but *everyone can do a little,* and *it is plainly his duty to get busy.* * * * * *

When a campaign for college endowments is started it must be maintained from year to year. It should never be permitted to lag, for however successful it may be in twelve months, there will never be enough taken in to

place the institution on a firm foundation. Work must go on.—Editorial, *Hahnemannian Monthly.*

[NOTE.—The *Eclectic Medical College* is in the same situation as three of the Homeopathic schools—it needs endowments or outside financial aid in addition to its income from tuition fees and other sources. We have 1,986 living graduates in active practice, who could well afford to donate an average of ten dollars per year to their alma mater, which would produce an additional fund of nearly twenty thousand dollars annually, or the equivalent of a permanent fund of four hundred thousand dollars at 5 per cent. Many of our alumni can make contributions through their wills, or secure the assistance of some of their well-to-do patients. Too many of our graduates are prone to think they have done their full duty by their alma mater when they have settled for their tuition fees and settled down to a snug practice in acquiring money.—EDITOR.]

Needless Operations.

When we now and then gently object to what we consider unnecessary operations, either on the tonsils, the ovaries, the uterus, the appendix or the urethra, etc., we are taken to task by our ultra-orthodox readers. We are glad to see that such an orthodox surgeon as Prof. John O. Polak comes out unequivocally against needless operations which are being constantly performed on the female genitalia. (*Amer. Jour. Obstetrics,* April, 1919.) As he well says, all patients who leave the operation table alive are not cured. And the many uncured who travel from clinic to clinic and from physician to physician constitute a sad commentary on the heedlessness (and let us say needlessness) of much of present-day surgery.

In his clinic, during the past year, more than one hundred re-operations had to be done or undone because of the careless work of a previous surgeon. Among this number there were 43 sterile women with chronic inflammatory disease who had had dilation and curettage for the cure of their leukorrhea and sterility. Of this number, 39 had been subjected to this operation without having had their husbands examined for potency and previous or existing infection. Twenty-seven of these patients who had had previous operations for "chronic appendicitis," so called, returned complaining of the same pain and distress which first caused them to seek medical advice, or they dated their intestinal symptoms from the operation.

Another point to which the writer calls attention is the trend of many obstretric surgeons toward abdominal delivery in cases of obstetric lesions. In a study of 100 cases of contracted pelvis, with true conjugates as low as 8.5 and 8 c.m., it was shown that 81 were able to deliver spontaneously, four were terminated by low forceps, five were able to drive the head to the mid-pelvis, and were delivered with medical forceps, one was cranitomized, and nine, after a full test of labor, were subjected to section. One hundred mothers recovered, and eight children were lost.

While the abdominal route is a simple, quick and efficient method of

delivering a living child, it is a great economic waste for the mother, unless we limit its indications.—*Critic and Guide,* June, 1919.

The Physician Under Prohibition.

The inauguration of prohibition throughout the United States affects the physician not only as a citizen, but also as a professional man. Necessarily, the law provides some exceptions in the use of alcohol and various liquors containing alcohol for medicinal purposes. In a circular of instruction to internal revenue collectors and agents the Commissioner of Internal Revenue states that Section 1 of the Act of Nov. 21, 1918 (War Prohibition Law), provides that after June 30, 1919, until demobilization is proclaimed by the President, no distilled spirits, beer, wine, or other intoxicating or vinous liquors shall be sold for beverage purposes. It also provides that the commissioner shall prescribe regulations for the sale of distilled spirits for sacramental, medicinal and other beverage purposes. The commissioner directs that physicians may prescribe wines and liquors for internal use, or alcohol for external use, as stated last week. Such prescriptions must be in duplicate, both copies signed in the physician's handwriting. Not more than one quart of any liquor may be prescribed for a single patient at a given time, and in no case shall a physician prescribe alcoholic liquor unless the patient is under his constant personal supervision. Prescriptions must show the name and address of the patient, including the street or apartment number, if any, the date when the prescription was written, the condition or illness for which prescribed, and the name of the pharmacist to whom the prescription is to be presented for filling. Physicians should note carefully this provision: The prescription must designate a certain pharmacist, and no other pharmacist can fill the prescription than the one designated. The physician must keep a record, in which a separate page is allotted to each patient for whom alcoholic liquors are prescribed, and must enter thereon, under the patient's name and address, the date of each prescription, the amount and kind of liquors dispensed by such prescription, and the name of the pharmacist filling it. Licensed pharmacists or druggists may fill such prescriptions, provided the druggist's name appears on the prescription in the physician's handwriting, and provided the druggist has received a permit (Form 737), and provided he has qualified as a retail liquor dealer by the payment of a special tax. No prescriptions for alcohol or alcoholic liquors may be refilled. Druggists filling such prescriptions must preserve, in a separate file, one copy of each prescription filled, and once a month must send to the collector of internal revenue in the district in which they are located a list showing the names of physicians prescribing alcohol or alcoholic liquors, the names of the patients, and the total quantity dispensed to each patient during the month. If these reports show that a physician is prescribing more than normal quantity, or that any patient, through the prescriptions of one or more physicians, is procuring

more than the normal quantity, the facts shall be reported to the Commissioner of Internal Revenue and the United States Attorney. Pharmacists are instructed to refuse to fill prescriptions if they have reason to believe that physicians are dispensing for other than strictly legitimate medicinal uses, or that a patient is securing, through one or more physicians, quantities in excess of the amount required for legitimate purposes. If the prescription is medicated or denatured so as to be unfit for internal use, nonbeverage alcohol tax paid at the rate of $2.20 per gallon may be used in filling the prescription; but if it is not so medicated or denatured, liquor tax paid at the rate of $6.40 per gallon must be used. Physicians preparing or dispensing their own medicines or desiring alcohol for strictly scientific and medicinal purposes, must file an application for a permit with the collector of internal revenue of the district in which they live. This application must be accompanied by a bond furnished by a surety company or signed by two individuals as sureties. Both the application and the bond must be in duplicate. On receipt of the application and bond, the collector of internal revenue will issue a permit to the physician authorizing him to have on hand or in transit a certain amount of alcohol or alcoholic liquors, the amount depending on the size of the bond. A bond for $100 allows the physician to have on hand or in transit 20 gallons of alcohol or liquors. The physician must keep an account of all alcohol or alcoholic liquors purchased and on hand, and must be ready at any time to produce his records and satisfy the internal revenue inspectors that any amount used has been for legitimate, medicinal, scientific and nonbeverage purposes. Alcohol or alcoholic liquors purchased by a physician under these circumstances cannot be used for his own consumption. The instructions of the Commissioner of Internal Revenue to all Government officers is that the law and the regulations regarding alcohol and alcoholic beverages must be strictly enforced. Physicians should familiarize themselves with the instructions under the law, and should carefully and rigidly comply with all requirements. In case of doubt, it is best to secure a ruling or an opinion from the collector of internal revenue rather than to take any risk of violating the law.

Bills for a National Department of Health.

Three bills have been introduced in Congress providing for a national department of health. S. 814, introduced by Senator Owen, closely resembles the last "Owen bill." It provides for a department and a secretary of health; for an assistant, known as the commissioner of health, both to be appointed by the President; for the transfer to the Department of Health of the Public Health Service from the Treasury Department; the Bureau of Chemistry from the Department of Agriculture so far as it is charged with the investigation of adulteration and the enforcement of the pure food law; and of the Division of Vital Statistics of the Bureau of the Census from the Department of Commerce. The President is also authorized to

transfer by executive order any bureau, division or branch of the government engaged in public health work except the Medical Department of the Army and the Bureau of Medicine and Surgery of the Navy. The following bureaus are provided: Sanitary Research, Child Hygiene, Vital Statistics, Food and Drugs, Quarantine, Sanitary Engineering, Government Hospitals, Personnel and Accounts. An advisory board of seven expert consultants and an official conference of state and territorial health authorities are also authorized. H. R. 5724 introduced by Mr. MacDuffie, of Alabama, is similar to S. 814 in its general provisions. It does not specify the bureaus that are to be transferred, but leaves this subject to executive order. Instead of a general appropriation, section 10 of this bill appropriates ten million dollars annually; one million for co-operation with the states in establishing a homogeneous system of health administration and for the organization of permanent health agencies in each county; two million for the co-operation with the states in sanitation, each state to be allotted an amount proportionate to its area and population; five million for co-operation with the states in control of communicable diseases, and two million for scientific study of the causes and nature of transmission of disease, laboratory research and other investigations. S. 814 has been referred to the Senate Committee on Public Health and National Quarantine; H. R. 5724, to the Committee on Interstate and Foreign Commerce. Hon. Joseph I. France, U. S. Senator from Maryland and chairman of the Senate Committee on Public Health and National Quarantine, introduced on July 17 Senate bill 2507, creating a department of public health. The bill follows the general plan of the Owen bill, with some important modifications. It provides for a department of public health, under the direction of a secretary, who shall be a member of the Cabinet, and for three assistant secretaries; the first assistant to be a man trained in medical science, public health and sanitation; the second to be an expert in vital statistics; and the third to be a woman trained in medicine or nursing and public health. The U. S. Public Health Service and the Bureau of Chemistry are to be transferrel to the new department, which is also to have bureaus on vital statistics, sanitation, hospitals, child and school hygiene, quarantine, food and drugs, nursing, tuberculosis and personnel. The secretary of public health is directed to communicate with the governor of each state requesting him to recommend to the Legislature suitable legislation, with adequate appropriations to secure co-operation between the federal department of public health and the state board of health. Every state taking such action is to be entitled to its proportionate share of such funds as may be appropriated by Congress for carrying out the provision of the act. The secretary of public health is also directed to divide the United States into health states, districts, subdivisions and precincts, each conforming to the geographical boundaries of the various political divisions. Each state is to create a state board of health, with a state health officer and a health officer for each district, subdivision and precinct, the secretary of public health to appoint these state officers as fed-

eral health officers, "so that in each co-operating state every health officer of said state of each district, county or precinct therein is, by virtue of his selection by the local authorities, become also a federalized officer, and as such an integral part of the Department of Public Health." The Department of Public Health is directed to co-operate with the Department of Commerce, Labor and Interior in the collection of vital statistics, and to establish a uniform system of cards, records and reports regarding diseases, disabilities, industrial accidents, births, deaths, physical conditions of schoolchildren, the number and condition of existing hospitals, etc. The bill provides for the appropriation of $15,000,000 for 1920, to be prorated among the states in proportion to their population as soon as the states comply with the provisions of the law and the regulations of the secretary of public health, provided that each co-operating state must contribute to the public health work a sum equal to that contributed by the federal government, and that it must make full and complete reports of births, deaths and morbidity. It also appropriates $48,000,000 for the construction of sanatoriums and hospitals, this sum to be distributed among the states in proportion to their population, each state receiving its allotment to provide an equal amount, also location, plans and means of future support for the proposed hospital.

Appropriations for the U. S. Public Health Service.

The Public Health Service has been granted the following appropriations in the Sundry Civil Bill which has passed Congress: For pay, allowance and quarters of commissioned medical officers, $850,000; for pay of noncommissioned medical officers, $300,000; for pay of all other employees, $700,000; for traveling expenses of officers officially detailed to attend meetings to promote public health, $40,000; for light, fuel and water, $125,000; for furniture and repairs, $8,000; for medical and hospital supplies, $85,000; for maintaining the Hygienic Laboratory, $27,000; for maintenance of Marine hospitals, $625,000; for medical examination of all persons so entitled, $220,000; for shipment of bodies, $5,000; for scientific books, $500; for medical, surgical and hospital services for all persons entitled to treatment under provisions of the War Risk Insurance Act, $4,000,000; for the maintenance of quarantine service, $20,000; for the prevention of epidemics of cholera, typhus fever, yellow fever, smallpox, bubonic plague, Chinese plague, trachoma, influenza or infantile paralysis, to be spent in the discretion of the President, in any threatened or actual emergency, $400,000; for field investigation of the propagation and spread of disease, $300,000; for interstate quarantine service, $25,000; for special study and demonstration in rural sanitation, $50,000; for special study in pellagra, $30,000; to regulate the sale of biologic products, $35,000; for the maintenance of the Bureau of Venereal Disease, $200,000; for the improvement of the Hygienic Laboratory, $20,000. Regarding the consolidation of the public health bureaus of the Government, the bill, as finally enacted, contained the fol-

lowing provision: "The heads of the several executive departments and other government establishments are authorized and directed to submit to Congress, not later than the first Monday in December, 1919, a statement showing for the fiscal year of 1919 the activities of their respective establishments pertaining to the public health and the amount expended on account of each of the said activities." This language was agreed to after much discussion, and is believed to be the first step on the part of Congress toward the eventual establishment of a department of health of the federal government similar in scope to the other executive bureaus of the government. Improvements for Marine hospitals are included, as follows: At Chicago, $121,000; at Cincinnati, $10,000; at Mobile, Ala., $60,000; at Savannah, Ga., $10,000. The medical department of the army was granted the following appropriations: For artificial limbs, $50,000; for appliances for disabled soldiers not entitled to artificial limbs or trusses, $1,000; for trusses for disabled soldiers, $1,500; for improvement of the Providence Hospital, Washington, D. C., $2,000. An effort on the part of the Senate to appropriate about $2,500,000 for use by the Interdepartmental Hygiene Board to protect citizens against venereal disease failed. The money appropriated at the last session of Congress for this, and which remains unexpended, was reappropriated for this purpose.

Adenoids.

As a result of an extensive survey among population centers conducted by the United States Public Health Service, it is announced that adenoids are handicapping more than 10 per cent. of American children, and considerable proportion of the defects revealed in medical examinations conducted by draft boards indicated that a large proportion of the defects discovered were unquestionably due to the failure of the parents to pay attention to the physical defects in young children. The Public Health Service has prepared a booklet on "Adenoids," for distribution to parents and school authorities, which tells how the first appearance of adenoids may be detected, and points out the means of relief of this condition.

A New Ruling on Narcotic Drugs.

In accordance with the decision of the United States Supreme Court in the Doremus case (*The Journal,* June 7 ,1919, p. 1698), the commissioner of internal revenue in Treasury Decision 2879 has revoked the ruling made in Treasury Decision 2200, May 11, 1915, permitting a physician to dispense or prescribe narcotic drugs in a quantity more than is necessary to meet the immediate needs of a patient. The old ruling permitted a doctor to prescribe a sufficient amount of narcotic drugs to supply the patient for a reasonable length of time. The Supreme Court holds that an order for morphin issued to an habitual user thereof, not in the course of professional

treatment in an attempted cure of the habit, but for the purpose of providing the user with morphin sufficient to keep him comfortable by maintaining his customary use, is not a prescription within the meaning and intent of the act. The commissioner therefore rules that prescriptions for narcotic drugs in a quantity more than necessary to meet the immediate needs of a patient are violations of the law, and that the writer of such a prescription, the druggist who fills it, and the person obtaining drugs thereunder, are all liable, regardless of the dosage indicated by the prescription. This means that, under the ruling of the federal Supreme Court, physicians prescribing narcotic drugs are permitted to prescribe only such amounts as are necessary for the immediate needs of the patient.

OBITUARIES.

Abbott, Frederick Wallace, Eclectic Medical College of Maine, 1886, member of the Massachusetts and National Eclectic Medical Associations, died at his home in Taunton, Mass., June 20, aged fifty-eight.

Bullard, Clarence C., Georgia College of Eclectic Medicine and Surgery, Atlanta, 1891, died at his home in Opelika, Ala., June 1, aged fifty-five.

Catoggio, Philip Joseph Eclectic Medical College of the City of New York, 1910, died at his home in New York City, May 20, aged thirty-four.

Drake, Lester M., Eclectic Medical University, Kansas City, Mo., 1904, as a result of an accident, died at his home in St. Joseph, Mo., May 23, aged forty.

Ekermeyer, Simpson Matthew, Eclectic Medical Institute, Cincinnati, 1881, died at his home in New Bremen, O., May 5, aged fifty-eight.

Givens, Amos J., Eclectic Medical Institute, Cincinnati, 1886, superintendent and proprietor of Stamford Hall Sanitarium, specialist in the treatment of mental diseases and drug addiction, died at his home in Stamford, Conn., July 7, aged fifty-five.

Houser, William Wesley, Lincoln, Ill., Eclectic Medical Institute, Cincinnati, 1859, was struck and killed by a street-car in Lincoln, June 23, aged eighty-one.

Johnson, Perry C., Eclectic Medical Institute, Cincinnati, 1889, died at his home in Lakeland, Fla.

Strickler, Stephen L., Eclectic Medical Institute, Cincinnati, 1879, died at his home in Boggstown, Ind., May 23, aged sixty-five.

Thomas, H. B., of Flint, Mich., American Eclectic Medical College, Cincinnati, 1883, died at Lafayette, Ind., June 5, aged seventy-four.

Willis, Mary A., Eclectic Medical College of the City of New York, 1886, physician to the Rescue Home for Women and the Children's Paradise, Jersey City, died at her home in Jersey City, N. J., July 14, aged seventy-four.

Williams, Stephen L., American Eclectic Medical College, St. Louis, Mo., 1879, died at his home in Spring Garden, Ill., June 4, aged eighty.

NEW MEMBERS.

New applications for membership from June 1, 1919, to September 1, 1919:

Arkansas—Billingsley, C. L., Ash Flat; Sloan, C. E., Cabot.

California—McGraw, Harriett G., Los Angeles.

Georgia—Avakian, V. A., Rossville; Arrington, J. R., Murrayville; Chastain, W. C., Buckhead; Edwards, ———, Doreum; Green, Samuel, Atlanta; Hughes, J. A., Woodstock; Irwin, Emmett, Blakley; Liles, H. D., Oakwood; Maxeys, H. G., Maxeys; Robach, J. L., Jonesboro; Gibson, J. T., Porterdale.

Illinois—Brunk, Thos., Alton.

Indiana—Moses, F. W., Indianapolis; Sluter, S. D., Wolcott.

Kentucky—Northcutt, Elmer, Lexington.

Massachusetts—McKinney, Harold N., Boston; Martin, Orel F., Medford; Nichols, Robt. H., Boston; Power, Robt. W., Boston; Richardson, H. L., Somerville.

Nebraska—Hornbeck, A. R., Murdock.

South Dakota—Schulte, J. A., Aberdeen.

READING NOTICES.

Conquering Hay Fever.—The long deferred hope of the medical profession that a means would be found to really uproot the causes of hay fever and make mere palliative treatment unnecessary, seems to have been at last fulfilled. From various sources come reports from physicians who have been trying out the proteogen treatment in these cases, and excellent results are announced. Among these cases was an Oregon school teacher's "rose fever" of twenty years' standing, which yielded completely after treatment with Proteogen No. 4, indicating that its therapeutic action is not confined to combating the influence of the usual ragweed or golden rod pollens. The Merrell Company assures us that the hay fever proteogen is now successfully employed by legions of doctors, who are enthusiastic over the permanent results being obtained.

A generation or more ago, the sentiment of the medical profession was in favor of descriptive names of ethical remedial agents; the opinion prevailed that names indicative of the composition of pharmaceutical agents offered ample protection against confusion. It was in conformity with this sentiment that Glyco-Heroin was selected as the most appropriate name for what has come to be one of the most universally esteemed respiratory sedatives.

But experience ultimately proved that the non-descriptive appellation affords a much greater measure of protection against confusion. Accordingly, Glykeron was selected as an alternative name for this preparation.

Glykeron and Glyco-Heroin now being synonymous appellations and

familiar as such to all dispensing pharmacists, the physician may use these names interchangeably when prescribing what was originally known only as Glyco-Heroin (Smith). Since Glykeron is the more distinctive appellation, its use is suggested to physicians when prescribing this well known preparation for cough, bronchitis, pneumonia, phthisis, whooping-cough and kindred affections of the respiratory system.

Glykeron and Glyco-Heroin (Smith) are synonymous appellations, and are now known as such to all dispensing pharmacists.

These names may now be used interchangeably by the physician when prescribing what was originally known only as Glyco-Heroin (Smith).

Glykeron is the more distinctive appellation and affords the physician a greater measure of protection against confusion on the part of the dispensing pharmacist when this preparation is prescribed for cough, bronchitis, pneumonia, phthisis, whooping-cough and kindred affections of the respiratory system.

Cod Liver Oil in Summer.—A great many physicians have the idea that the administration of cod liver oil during the summer is not possible, on account of the stomach's objection to the ingestion of fats.

If Cord. Ext. Ol. Morrhuae Comp. (Hagee) is employed, the advantages offered by cod liver oil may be enjoyed during the summer just as well as during colder weather. The feature of superiority of Cord. Ext. Ol. Morrhuae Comp. (Hagee) lies in its exceptional palatability and freedom from the obnoxious oily properties of the plain oil. At the same time it offers to the patient every therapeutic and nutritional virtue that the plain oil has, for in its process of manufacture the essential active elements have been retained. It has been shown that the superior therapeutic properties of cod liver oil depend upon these active elements.

The physician may be assured that in Cord. Ext. Ol. Morrhuae Comp. (Hagee) he is giving his patient not only a palatable cod liver oil preparation, but also one that possesses the excellent and dependable qualities of plain cod liver oil.

Sleep for the Aged.—It often happens that elderly patients suffer from restlessness and sleeplessness, which they may need badly. The physician hesitates to give chloral or the bromides and may be put to his very wits' end to find an agent that is effective and at the same time safe for these old patients.

In Pasadyne (Daniel) he will find a sleep producing preparation upon which he may rely to bring about quiet and restful sleep, and which is not depressing. Pasadyne (Daniel) is simply the concentrated tincture of passiflora incarnata, and has marked somnifacient properties. In the aged it has a special field of usefulness, for it does not depress these old people, a condition which must be carefully guarded against. Pasadyne (Daniel) may be fully depended upon. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Georgia.

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THE DIAGNOSIS AND TREATMENT OF CARDIO-VASCULAR DISEASE FROM A MILITARY STANDPOINT

CARLL S. MUNDY, M.D., TOLEDO, O.

The disposition to be made of soldiers with cardio-vascular disturbances is a difficult and complexing question. During the period from June 5, 1917, to the present date the standard of acceptance set for the local boards has varied widely. As a result, a large number of recruits with supposed or actual circulatory disturbances have more recently been referred to the review boards and to hospitals for disposition. A number of rules with their exceptions have been laid down for our guidance in reaching an opinion in these cases. The real criteria, however, depend upon the opinion of the examiner as to the functional capacity of the heart, with which I shall particularly deal in this discussion.

The determination of functional capacity is comparatively new. At present there is no uniform or definitely accurate method at hand. Neither is there any definite point above which a soldier may be accepted and below which he should be rejected, because of functional incapacity.

Early in the war the Royal Army Medical Corps classified the service according to the severity of physical exertion, thus eliminating the necessity for a definite standard and increasing the number of circulatory disturbances which might be accepted for military service. At first this classification was somewhat complex, but more recently it has been simplified, there now being four classes:

A. General Service.

B. Limited Foreign: 1. Garrison. 2. Labor or partially outdoor. 3. Sedentary.

C. Limited Domestic: 1. Garrison. 2. Labor or partially outdoor. 3. Sedentary.

D. Unfit for Any Service.

Our own classification is an adoption from this in an even simpler form. In this there are but three classes:

A. Full Duty.

B. Domestic Duty: 1. Limited. 2. Special.

C. Unfit.

At present only Class A men or those without any organic lesion are

considered fit for foreign service. In accepting men for limited or special domestic service, we must be guided by several factors, namely: the character of the lesion, the functional capacity of the heart, and adaptability to the service. There are, of course, certain types of lesions which are known to be compatible with sedentary or light occupations. If soldiers with such lesions have a functional capacity which is sufficient to warrant the belief that acute heart failure or a break in compensation is not imminent, they should be recommended for domestic service. This recommendation, however, should not be made without consideration of the personal equation of the soldier. His civil occupation, education, capabilities and inclinations are all important, and an effort should be made to obtain such information. For example, a man with an old organic lesion may have been working at a lathe for several years without inconvenience, yet he can not stand heavy drill. As a master mechanic he may be of service, provided he is not seeking a discharge. Of course, it is often impossible to place a soldier in a position similar to that occupied in civil life, yet one with a certain degree of adaptability and intelligence should be retained; while another, equally impaired physically, but with a lower mentality, might be less suited for military duty.

As for the neuro-circulatory disturbances which so frequently occur in neurotic and hysterical individuals, it is an almost universal rule that they are unfitted for foreign service. This comment needs no explanation. Their acceptance for domestic service should depend upon the amount of functional cardiac capacity and the features of the neurosis which might render him unreliable for any of the duties of a soldier. Many of these cases, when assured that they are not going overseas, if assigned to limited or special duty may become valuable. Incidentally they are much less liable to return to the hospital under such circumstances. In brief, one might expect the new recruit to follow the occupation in military life that he followed previously. This does not hold good, however, for those who have been doing heavy duty for some time and had previously followed a sedentary or light occupation. It is well known that a prolonged period of heavy drill will aggravate a relatively mild lesion to such an extent that the soldier is no longer serviceable. In those cases more care should be taken to make sure of his capacity. It is important to the government that the soldier be fitted physically as well as by early training for the class in which he will be most useful.

Thus far, much has been said about the functional capacity of the heart, but nothing about the method of estimating it. From the amount which has been written and the various methods advanced for determining this factor, one may judge that its importance in the prognosis and diagnosis of cardiac conditions is being well realized. Dr. Leo Price, in a recent volume on "Diseases of the Heart—Their Diagnosis, Prognosis and Treatment," says: "The primary test to which all cardiac cases must be put revolves itself into the simple question of integrity of function under strain." This factor in the diagnosis and prognosis of heart conditions is by no means new. McKenzie frequently refers to it in his writing. But its prime importance has certainly

been realized only recently, and the numerous functional tests offered are but the natural results. These vary from elaborate instrumental measurements to the simple expedient of counting the pulse before and after exercise. Rapport, Barringer and Cotton, Rapport and Lewis, have shown that the pulse rate and systolic blood pressure taken at frequent intervals immediately after exercise is discontinued are very accurate guides. The extent to which the pulse rate and systolic pressure is raised in a given individual is in direct proportion to the amount of foot pounds of work done. This is true in cardiac conditions and normal individuals. The cardiac case, of course, shows the greater rise and slower return to normal with a given amount of work. For purposes of comparing them it is important that the actual amount of work done during a functional test should always be the same. Aside from the additional complexity, it would seem from the conclusions drawn by the authors that there is very little to be gained by taking the combined systolic pressure and pulse reading, as the curves described are very similar in individual cases. A search of recent literature, however, has shown that little has been written about the variation in pulse pressure and heart load or function coefficient before and after exercise. It will be recalled that the pulse pressure is represented by the difference between the systolic and diastolic pressure and represents the amount of work the heart is compelled to do to overcome diastolic resistance and accelerate the movements of the blood column. It may therefore be termed the heart load or function coefficient and may be conveniently expressed in percentages. For example, with a systolic pressure of 120 mm. and diastolic pressure 80 mm., the pulse pressure would equal 40. The function coefficient could be expressed as 40/80 or 50 per cent. It is also logical to assume that in a healthy heart this function coefficient will bear a definite ratio before and after exercise to the pulse rates. This hypothesis was advanced by Major Stone about a year ago while on the cardio-vascular review boards at Camps Zachary Taylor and Custer. It was put to practical use there and has been in use here for the past six months. The method as used is something as follows: The patient while lying in bed has the arm band of the blood-pressure instrument applied and his blood pressure and pulse rate recorded. He is then instructed to hop on one foot 100 times. Immediately after, he lies down and the pulse rate and pressures are again recorded. For example, if before exercise the pulse rate is 80 and the blood pressure is 120/80, then the function coefficient is 40/80 or 50 per cent. Our ratio of pulse rate to F. C. is as 80:50. In a normal heart the ratio after exercise should approximate this. If, for example, the pulse rate immediately after exercise is 160, or double that before exercise, we would expect the function coefficient to also be double that before exercise or 100 per cent. But if the blood pressure when taken, systolic 150 and diastolic 90, we would have a function coefficient of 60/90 or 66 per cent. In which case the response to effort is 34 per cent. less than the expected response. Our conclusion would be that for that one test the functional capacity was below the average. If a series of tests taken over a period of time are consistently found to be unsatisfac-

tory, we would consider that the functional capacity of the soldier's heart was below par. This method can be easily and quickly used during an examination, and taken in conjunction with the time required for the pulse rate to return to normal will serve as a very good indication of the functional capacity of the heart, as measured by the response to effort. We are also able to judge definitely of the functional capacity by the graded system of exercises and drills which are given our cases.

The first step in the classification of cases is to separate the organic from the so-called functional or neuro-circulatory lesions. This differentiation may be made both from the examination and from the history. For the former, two very safe rules may be followed; first, that all the diastolic or presystolic murmurs are organic. In this connection great care should be taken not to consider an impure first sound as a definite presystolic murmur. A large percentage of the neuro-tachycardias have a diffuse apex beat which may easily be mistaken for a thrill, and an impure or rumbling first sound which is often considered a murmur. As a result many functional conditions are sent in with a diagnosis of mitral stenosis. The second rule suggested is to consider all systolic murmurs accidental or functional unless they can be proven otherwise. If the murmur is organic, the following conditions, either all or in part, will be found present: First, the murmur should be harsh in character and transmitted either well into the left axilla and back in mitral lesions, or into the neck in aortic. Often they are accompanied by other murmurs, presystolic or diastolic in mitral lesions, and nearly always by a diastolic murmur if the lesion is of the aortic valve. Systolic murmurs at the apex which are not organic are classified as functional, those at the base as accidental. Systolic murmurs at the base are nearly always accidental, especially if they are heard plainest along the left border of the sternum. If they are heard along the right border and over the manubrium, care should be taken to exclude an aortitis, in which case they will usually be accompanied by broadening of the arch and persistent extra systoles with pulsation or thrill in the supra-sternal notch. A history of syphilis or positive Wassermann will be additional confirmatory evidence. A systolic murmur at the apex, if organic, is accompanied by a definite enlargement of the heart either to the right or left, or both. The apex beat is usually heaving and the character of the sounds is altered. The second pulmonic is accentuated and the first sound either obliterated by the murmur or may be snappy in character. Finally the importance of the history can not be overemphasized. In organic lesions one should find an etiological factor, usually a history of a definite attack of arthritis closely following which the patient noticed that he was becoming more or less dyspneic. In the absence of such a history care should be taken to eliminate chorea, tonsillitis, pneumonia or any other of the infections which are known to be frequent causes of endocarditis. On the other hand, a neurotic personal or family history, especially on the maternal side, is just as good evidence of a neuro-tachycardia. As additional evidence confirming the presence or absence of an organic lesion the X-ray is used in all doubtful cases. The size of the heart is always de-

termined by percussion and compared with the breadth of the shadow on the plate. This confirmation is most essential in cases of aortitis where a broadening of the arch is suspected.

Since June 1st, 13 per cent. of the total number of cases admitted to the heart ward have been cases of tachycardia. They have been divided into groups, those of toxic origin, as early pulmonary tuberculosis, hyperthyroidism, badly infected tonsils or pyorrhea, and the nero-tachycardia or so-called N. C. A. cases. These latter present certain definite characteristics. First, they have a neurotic family history in a large percentage of cases. Concomitant neurotic or hysterical features are present. Fainting, giddiness, dyspnea, precordial pain or hyperesthesia are all constant symptoms. The apex beat is usually diffuse and may be easily mistaken for a thrill. The heart is not enlarged. The first sound may be impure or snappy and the second pulmonic is often slightly accentuated. The tachycardia is postural; that is, the rate is greatly increased from a prone to an erect position and is again decreased when the patient leans forward. The systolic blood pressure is usually increased, in most cases being about 150 mm. Finally these cases seem to be benefited by exercise.

The treatment of heart cases necessarily falls into two groups—the organic and the neuro-tachycardia. The line of treatment followed in organic lesions depends to some extent upon the disposition that is to be made of the case and whether or not it is line of duty. A case which is to be discharged and which is not in line of duty, should not, of course, be placed in line of duty by operation procedures. On the other hand, a condition which has arisen in line of duty must have every effort made to relieve it before the case is discharged. In this last type of case, or in those when there is reason to believe that the condition will improve to such an extent that the soldier will ultimately be fit for service, any foci of infection which may be etiological factors are removed. Of these root abscesses, pyorrhea and infected tonsils are the most frequent. The diagnosis of root abscess is always confirmed by the X-ray before the patient is sent to the dental department, and tonsils are not considered as infected unless pus can be expressed from them. For this purpose an instrument designed by Major Hess has been found to be extremely valuable. In cases where the sequence of events has been acute tonsillitis or chronically infected tonsils, acute arthritis and acute endocarditis resulting in more or less permanent damage to the valves, great care must be exercised in determining the most opportune time for tonsillectomy. Our procedure now is to give the acute arthritis a reasonable time in which to subside. After the temperature and pulse rates have been normal for ten days or two weeks the patient is sent to light drill twice daily for a week. If then there are no signs of the arthritis being aggravated he is sent to Section "L" for tonsillectomy. Following the operation he is kept in bed forty-eight hours and returned to the heart ward on a stretcher, where he remains in bed from four to seven days longer, depending upon the amount of damage previously done to the heart valves. To date we have had quite a number of cases operated without any bad results.

Digitalis is used only in cases of acute endocarditis and cases of acute break in compensation, the large percentage of which are cases of fibrillation. Here it is given in its maximum dosage. The preparation used is the tincture, standardized to 17 cc. per pound of body weight and used to the point of physiologic effect.

The cases of neuro-tachycardia are treated by graduated drill and exercise. Immediately upon entering the ward they are put to bed for three or four days, if they have a persistent pulse rate of 130 or over. If they are poor sleepers bromides are given in sufficient doses to insure two or three good night's rest. This is usually sufficient to bring the rate below 120. The patient is then allowed to remain about the ward for a day before being started on the series of exercises. These consist of five classes, graded in severity. In the first they get fifteen minutes very light setting-up exercises in the morning. The second and third consist of fifteen minutes setting-up exercises in the morning, the latter more severe than the former, and from fifteen minutes to a half hour light drill in the afternoon. The fourth class have twenty minutes severe setting-up exercises in the morning, and a half hour drill in the afternoon. The fifth, a half hour exercise, followed by a half hour hike in the morning and an hour hike in the afternoon. Between times the patients are kept as busy as it is possible to keep them, thus allowing but little time for introspection. Immediately after exercise the pulse rate is taken, and if it is above 100 it is taken again in five minutes. The degree of progress being made is judged by the pulse rate and by the patient's actions during drill. The most favorable cases can be advanced from class to class every four or five days.

In disposing of our cases, none with organic lesions are recommended for full duty. All well developed cases of mitral stenosis and aortic lesions are recommended for discharge. Cases of aortitis, if they are confirmed by the X-ray and show a positive Wassermann, are also recommended for discharge. If the functional response is good and Wassermann negative, they may go to limited domestic duty. Mitral insufficiencies are not discharged unless the hypertrophy is marked, beyond the nipple line to the left and more than 4 cm. beyond median line to right. When this amount of hypertrophy is present, even though the functional response at the time of examination may be satisfactory, the prognosis is not good. Other cases of mitral insufficiency are not discharged unless their functional response is unsatisfactory or a history of a previous break in cardiac compensation can be obtained.

Disposition of the neuro-tachycardias is made as follows: If they are able to go through the drill given in the fifth class they are sent to full military duty. If they are unable to stand the drill in classes one or two they are discharged as unfit for any service. Those in intermediary classes are sent to special or limited domestic duty as circumstances may indicate.

As the series of cases of neuro-tachycardia which have been sent to duty is still small, we are not offering any statistics at this time. Arrangements are now being made to follow and observe these cases after they are sent

to their command. If the opportunity is given we shall present the data on the final results obtained in the treatment of these cases at a future date.

First Series.

Fingers—Forward, back; close, open; circular.

Right ankle—Hands on hips, *place,* down, up; in, out; circular.

Wrist—Forward, back; up, down; circular.

Left ankle—Hands on hips, *place;* down, up; in, out; circular.

Arms—Arms sideward, *raise;* forward, back; up, down; circular.

Toe exercise—(Two counts); up, down.

Deep breathing exercise.

No drill in the afternoon.

Second Series.

Shoulders—Arms to thrust, *raise,* forward, backward; upward, downward; circular. (Circular four counts, forward, upward, backward, downward.)

Right leg—Hands on hips, *place;* down ,up; in, out; circular.

Neck—Hands on hips, *place;* forward, back, right left; circular six counts.

Left leg—Same as right leg.

Trunk—Hands on hips, *place;* forward, backward; right, left, circular (six counts).

Arm exercise—Six counts, forward; sideward; upward; sideward; forward; place.

Side Straddle Full Bend—Side straddle position, arms upward, fingers laced, *place;* downward, upward, touch knuckles to ground, knees extended.

Deep breathing exercises.

Fifteen minutes' drill in the afternoon.

Third Series.

Side straddle triplet; side straddle position, arms upward, thumbs locked (or fingers laced), *place;* downward; upward; right, left; circular.

Squatting exercise in three counts.

Leaning rest leg exercise; leaning rest position, *place* (two counts); flex right knee (two counts), flex left knee (two counts), right leg, position, *place;* alternate flexing knees (two counts), company attention.

Arm exercise, twelve counts, right arm, forward; sideward; upward; sideward; forward; *place.* Left arm the same.

Squatting, hands on ground, leg exercise; squatting, hands on ground position. *Place,* right, left, both legs. Company attention.

Deep breathing exercises.

Thirty minutes' drill in the afternoon.

Series Four.

Leaning rest arm exercise; leaning rest position, *place;* flex arms (two counts). Company attention.

Leaning rest; leg sideward exercise; right, left, both.

Side straddle exercise; ready, exercise (two counts).

Squatting, hopping, circle arms exercise; squatting position, *place;* arms, sideward, raise; hop and circle arms (one count).

Squatting, leaning, rest, squatting, hands on ground, position, *place.* Extend and flex both legs (two counts).

Free arms; forward, backward; upward, sideward, downward, sideward; circular.

Deep breathing exercises.

Thirty minutes' drill in the afternoon.

Series Five.

Series five consists of four and three combined. Half-hour drill in the morning and hour hike in the afternoon.

The formula mentioned on page 101 is worked out as follows:

Before exercise. Rate=80; Systolic Pressure=120. Diastolic=80. Pulse Pressure=Sys. P.—Dias. P. or 120—80=40. Function Coefficient=PP Rate=40-80=50%.

After exercise. Rate=160. Systolic Pressure 150, Diastolic 90.

Expected response. Rate: F. C.::$Rate_2$:x; or 80:50::160:x; x=100% expected response.

Response to effort would be $PP_2 \div DP_2$, or 150—90=60 or PP_2.

$PP_2 \div DP_2$=60-90 or 66%.

Response to effort 66% is 34% less than 100% or expected response.

AN IMPORTANT PROBLEM OF THE AGE: THE CARE AND TREATMENT OF MENTAL AND NERVOUS DISEASES.

Amos J. Givens, M.D., LL.D., Stamford, Conn.

The importance of this subject can hardly be overestimated. It is difficult to accept the optimistic assertion, "no increase" or "an inconsiderable increase," of nervous diseases. Public and private testimony both, by overwhelming majority, oppose such deductions. The problem of disposition of these cases is a growing problem, more especially as about 50 per cent. of the mental cases admitted to state institutions remain as more or less permanent residents. We import much material which is manufactured into the nervous and insane; the American product of American stock shows no signs of diminishing. Why, therefore, should not these diseases increase?

This paper will not discuss increase. A single statement regarding the prevalence of mental diseases will suffice to illustrate how the census enumeration, alone, indicates the magnitude of the problem of care and treatment. While the population of the United States increased about 11 per cent. between 1904 and 1910, the population in state hospitals increased about 27 per cent. A stereotyped phrase that increasing admissions indicate only greater confidence in institutional care, is so afflicted with old age that it is practically worthless. In the course of its long lifetime Nature had ample

opportunity to remove several times over all the mental cases alive when it started.

From 1890 to 1904 state hospitals increased 100 per cent; from 1904 to 1910, 13 per cent. This tremendous increase in accommodations has proved insufficient. From all parts of the country superintendents of state hospitals report overcrowding. Long delayed appropriations authorized building. While a structure is being completed, the existing hospital will be filled far beyond its capacity. The new building is opened; congestion relieved by transference; but meanwhile applications have accumulated, new commitments quickly absorb space. Long before another appropriation is secured history repeats itself. To the congestion of the mental cases is added that of necessary nurses and attendants.

Overcrowding limits comforts, creates a disturbing atmosphere, prevents proper use of hydro and mechano-therapeutics, occasions more frequent resort to some form of restraint, lessens air space, increases fire risks, danger of epidemics and accidents, and overworks seriously physicians and nurses. In one state, where I am familiar with the statistical data, one patient to each 351 of the general population is undergoing treatment in a state hospital. The normal capacity of the hospital is 550, but 713 patients were under treatment when the report ending September 30, 1910, was made up, and another hospital at the same period was crowded "far beyond the limit of health and safety," and for ten years had been burdened with an excess of its normal capacity. Alienists emphasize the need of individual and early treatment of mental cases.

The questions of ample accommodations, of adequate medical and nursing staffs, of scientific care prior to admission and after recovery, rest with the public and its representatives; therefore no solution of the problem as a whole is possible without widespread education of the "plain people." Old and erroneous impressions still prevail. Unfavorable environmental influences are bad for the sane; they are infinitely worse for the mental case.

In addition to the insane must be considered the feeders of the supply, sufferers from diseases of the nervous system, borderline cases, etc. This class increases the number of the mental cases both directly and indirectly. It aids in furnishing subsequent generations with the diathesis predisposing to mental diseases.

Successive advances in psychiatry emphasize the urgent need for early treatment of all deviations from normal functioning of the mind, and under the most favorable conditions obtainable. The realization of this need is attested by the increase in psychiatric wards, pavilions, sanitariums and hospitals. These are established for the first care and observation of mental patients and the treatment of acute and curable mental diseases. One of the most recent of these curative institutions contains an out-patient department with social service staff, admitting ward, observation private rooms, observation wards, acute wards, rooms for continuous baths, a basement fully equipped for all forms of hydro and mechano-therapeutics, an operat-

ing suite, solarium, laboratories, balconies, roof-garden, assembly rooms, day rooms, rooms for X-ray photography, etc., and administration.

It would seem to be obvious that every institution receiving new patients suffering from mental diseases should be supplied with psycopathic wards, preferably pavilions. Diagnosis of these cases is often difficult, frequently requires time as well as skill and all the aids afforded by modern facilities. Such institutions can not but prove favorable to patients, and aid in solving the problem of their suitable accommodations.

In a commercial age it would seem that the economic side of this question would appeal to the average taxpayer if he were only aware of the much larger proportion of cases recovered by early and scientific treatment and the immense cost of prolonged care of the patient. At a public hearing on the alien insane in the New York state hospitals, July 1, 1912, Mabon, director of the Manhattan State Hospital, testified that at the present price of maintenance the alien insane alone in that hospital would cost the state $3,413,200 in the course of ten years. This is but a single illustration.

A few months, even weeks, in cases of incipient mental diseases before coming under scientific treatment, may make the greatest possible difference in prognosis; and another object is, of course, not merely cure, but prevention. This is not the place to speak *in extenso* of the advantages of sanitarium treatment, but the admirable results obtained by the removal of the nervously affected from their accustomed environment and activities have long been well known, and it is not surprising that legislators should be inclined to authorize the establishment of such institutions for appropriate cases unable to avail themselves of the comforts, quiet, trained care and skilled treatment of the still more desirable private sanitoria.

In the solution of the problem of the care and treatment of those nervously and mentally ill, modern methods mark a radical departure in almost every particular from those of a few generations ago. The cottage system, or the employment of small groups of small, detached buildings, introduces a more homelike atmosphere and provides for the separation of patients into small classified groups.

The family care system for the chronic, harmless insane is practiced to a certain extent in several states. Doubtless it could advantageously be still further extended. In Gheel, Belgium, this method has been in practice for more than one hundred years. Nearly every house in Gheel contains at least two mental incompetents, and as a rule they are given their freedom of the town. Suicides are few; the death rate low; the percentage of recoveries for twenty-five years almost double that in England.

Chief among the agencies for solving the problem of the care and recovery of both nervous and mental cases stands occupational treatment. This is not a new method, but newly developed and applied. One hundred years ago, Dr. Benjamin Rush, that famous professor of the Institutes and Practice of Medicine in the University of Pennsylvania, published his shrewd and still serviceable "Medical Inquiries and Observations," in the course of which he highly recommends employment as a valuable form of treatment in mental

derangements. To employment he adds amusements, including concerts, evening parties, chess, checkers, cards, music, theatrical performances, billiards, tennis, baseball and playing quoits. It is impossible to enumerate here the many forms of industrial activity which have been developed. There is great need, however, for more general provision of well equipped workshops and trained teachers, for amusement rooms, assembly halls, etc.

Mere custodial care favors mental deterioration. Aimless inactivity is detrimental even to the sane. It is highly desirable occupation outdoors should be more frequently provided for women patients. Statistics for the past ten years show that the death rate from tuberculosis in hospitals has been more than twice as great for women than for men.

Other remedial measures yielding excellent results are the initial rest treatment, especially where patients present evidences of malnutrition, the use of the solarium, outdoor sleeping, the continuous warm bath for certain patients, free administration of water internally, massage and electricity in selected cases, operative correction when indicated by pathological conditions. Individualization must be the keynote; clinical and laboratory examinations and careful observation can not be dispensed with.

It will be obvious that the satisfactory solution of care and treatment is dependent to a considerable extent upon an adequate medical staff and excellent trained nurses.

Were it possible, the disposition of the insane and epileptic, of the drug habitue, the inebriate and the feeble-minded would be here touched upon. In all of them the public has a very vital interest, and a very grave responsibility. Their awakening to both is an essential part of the final solution, if such solution is to be found of this growing problem, which is one of the most important of all the important problems of the age, namely, the care and treatment of mental and nervous diseases.

A PLEA FOR PSYCHOTHERAPY.

THEODORE DAVIS ADLERMAN, A.B., M.D., BROOKLYN, N. Y.

Mr. President: An address to open the section of nervous and mental diseases could not be devoted to any better purpose than the reviewing of the interesting questions of psychotherapy, its history and problems.

I do not know why the impression stole into medicine that psychotherapy is a science of recent origin, and that its appliance in medicine belongs to the eighteenth or nineteenth centuries. As a matter of fact, the history of medicine shows us that psychotherapy is very old and may be easily traced to the very beginning of the history of civilization, when physicians of all schools and all ages recognized its importance in the treatment of disease.

Tracing its early origin, we find Iem Hetep, who lived 4,000 B. C., who not only practiced medicine, but was known especially for his ability to assure and to fortify (if I may use this expression) his patients and making them bear their sufferings with a fortitude which was absent in all cases of

his contemporaries. While his methods may have been somewhat crude, yet he practiced some of the principles of psychotherapy which are in use even today.

The Greek, Æsculapius, also did not neglect the powers of consolation in his practice, and used his influence over the minds of his patients together with his other means of curing disease.

The priests of Egypt, perhaps more than others, recognized the great influence of mind, and the methods of impressing the sick with hope and with suggestion plainly shows us the psychotherapeutic measures of those times. The medical thinkers of those ages, if medical we may call them, have as a matter of fact practiced many of the ideas that we are now adopting in many of the phases of psychology. The temples of Egypt were in fact the sanitariums or cure-houses of our present day. In those far ages people traveled to those temples as people now go hundreds of miles to the different sanitaria which may be known for this or for that particular treatment.

The great thinkers, like Hippocrates, Aristotle, Plato and others, have always claimed that the mind of the patient must be influenced in order to accomplish the desired results in bringing a cure for the ailments the patients were suffering from. The celebrated axiom of Hippocrates in regard to pain, "Of two pains occurring in different parts of the human body, the stronger pain will weaken the other," shows us distinctly that the mind, dwelling on the severe pain, ceases or obliterates the severity of the other.

Galen knew how to use mental influence to relieve human sufferings produced by disease. His writings show us the importance of use of mind over body, and all his writings insist upon the necessity of mind rest and mind's help in restoring the health and happiness of his patients.

Paul of Ægina, Alexander of Tralles, Alexander of Trallianus, all of them used mental therapeutics, therapeutic suggestion on the mind, and even tried psychoanalysis in their way, to allay some of the peculiar ailments of their day.

Avicenna and Rhazes, the great Arabian healers, preached that the human mind can favorably influence the human body in most of the ailments; that it was absolutely necessary to have the mind's help in producing the cures by drugs.

Mondeville always insisted that the mind of the body must be prepared for the acceptance of medical or surgical measures.

Petrus Pompanatius in all his writings claims that many ills of the human body are favorably influenced and cured by the influence of the minds of others.

Taking up the so-called modern times, we find Paracelsus, who, while recognizing the value of drugs in the treatment of disease, yet placed mental influence on the same pedestal as his medicines. He used suggestion and exerted his personal magnetism in treating most of his cases. His claims that he cured epilepsy by magnetism can not be doubted, with the exception that his epilepsy cases must have been cases of hysteria, with attacks of hysterical nature. This, however, does not take away from the fact that his

attempts of treating those diseases by psychotherapy were a marked event in the history of medicine.

Sydenham, Morgagni, Hunter—all recognized the influence of the mind on the body. These three men had a very good knowledge of psychotherapeutics and the far-reaching influence exerted by this method. They made no secret of their belief that hypnotic suggestion, persuasion, reasoning and re-education can be used in many ailments, and that cures could be claimed for many then supposed incurable conditions. I can not help but admire Hunter's statement, made in those early days, that "if a certain state of mind can produce a certain disease, another state of mind may produce a cure of this disease." This statement we of later days have verified time and again. Their claim for the influence of persuasion on disease was correct, as even today we know that all psychical treatment, no matter if it is direct or indirect, aims mainly at persuaasion of your patient. You persuade, you suggest, you influence the peculiar function of the nervous system. Let me state here that it is the neglect of this particular part of therapeutics that has driven millions of people away from the medical men into the hands of the different peculiar cults like Christian Science and a few others not worth mentioning.

If the physician will realize that he must, that he is obliged to consider not only the body of his patient, but his mind, his soul, as well, there will be no necessity for curtailing the privileges of these sects, as they will lose their patronage and go out of existence. But in order to be successful in this branch of medicine you must believe in it. You will not be successful unless you impart this belief in efficiency of your methods to your patients.

None of us will dare to deny the great work performed by Charcot in the domain of medicine. His discoveries in nervous pathology were remarkable. He placed the nervous ailments on a basis of knowledge, which was an epoch. His other discoveries were great, and yet his main success in treating nervous diseases was due to the remarkable influence exercised by him on his patients. His impressive personality and suggestion produced results even in cases where most others failed.

I mention the above to prove to you, gentlemen, that in psychotherapy used properly you will have a valuable adjunct in your professional life, no matter what branch of medicine you may specialize in. It is just as precious to the general practitioner as to the man who limits himself to a certain line of diseases only.

Psychotherapeutic measures are mostly of an educational nature. You suggest and educate the individual to do and perform certain things which in your estimation may be necessary for his welfare. You suggest and educate him to adopt measures which are necessary to promote the requirements of health, and you compel the adoption of these measures by the power of your mind.

The successful psychotherapeutist treats the patient and not the disease. He takes into consideration the individual, his surroundings and his peculiar environment, as well as the peculiar conditions presented by the

patient. Each and every case presents certain mental and personal manifestations which will influence the course of the disease, and which, if taken into consideration, will help in the final cure of your case. You all know how important it is to remove certain false notions from the mind of your case, if you desire to bring some improvement in his condition, and psychotherapy aims to remove all ideas which are harmful to your case.

This, however, is not enough. After you have succeeded in removing the unfavorable ideas from your patient's mind, and after you have implanted the more favorable notions, the problem before you is to so direct the mind of your patient as to keep the favorable impressions there constantly. This is perhaps no more strongly illustrated than in the treatment of hysteria, where the main problem is to keep the mind of the patient in a certain direction after you have succeeded in diverting his fixed ideas.

Many of the neurotic symptoms produced by an over-solicitous mind of a patient will be overcome and disappear if that same mind is diverted to the proper channels. This you will accomplish by securing the confidence, good will and co-operation of the patient by bringing forth the most favorable side of his case. In all the cases it is absolutely necessary to insist and to maintain the belief in your patient's mind of your personal power to help, and by asserting your will. To submerge your will to that of the patient is a signal of your failure. Never under any consideration should you allow the patient to make suggestions, either as to treatment or the general conduct of the case. Charcot was very particular about this part of his methods; his insistence on the carrying out of his very minute orders, as well as his reassurance, resulted in the fact that all people who came to him went away feeling better and with the idea that they would ultimately get well if they followed his directions.

It is not to the credit of the medical profession that irregular healers such as Father Kneip, Pastor Gassner, Father Matthew and many others recognized the wonderful value of psychotherapeutics and employed them in their own way to produce cures which were detrimental to the standing of physicians. The forcing personality of these healers, and their insistence of assuring the minds of their patients of their coming wellbeing, of their being cured of ailments, produced those very wonderful results in some very old, bedridden cases. Kneip's strong personality and his knowledge of psychotherapy produced the desired results, yet his methods completely failed when taken up by others after his death. What was lacking was the assurance as well as the persistence of Kneip.

Were I to mention here all diseases which may be benefited by psychotherapeutics it would fill a volume and keep you here for days. Sufficient, therefore, it will be if I select a few of the well known ailments for my purposes. For many years I have felt that many, if not all, operations for the so-called "reflex irritations" were neither justifiable nor necessary; that many of them, if not all, were simply performed by the so-called questionable gynecologists and orificial surgeons of questionable reputations, as means for money making; and now I am more than sure that I am right in this stand.

The physiological and functional insufficiencies resulting from these so-called reflex irritations can be treated and cures effected by psychotherapeutic measures. In most of these cases supposed to depend on "reflex irritations" all that is necessary is to stimulate the patient's subconscious processes and to encourage his or her involuntary physiological processes. Let me quote to you from the London *Lancet:* "Physiological methods of treatment can not be limited to functional diseases. Pathology itself teaches that the function of an organ be maintained, and if restored, the destructive metamorphosis is arrested."

I am not one to preach against certain operation for appendicitis, but let me mention here the fact that 75 per cent. if not more of the neurasthenics have certain degenerative changes in the structure of the appendix which disappear when your neurasthenic is cured, so that all these cases need not the surgeon, but the proper treatment by medicines and psycotherapeutic measures.

In my estimation, every surgeon should employ psychotherapy if he himself understands the principles of the same, or cause it to be used in his cases by a psychotherapist. Psychotherapy is a great ally and is of great benefit in most operations. It will diminish, if not entirely destroy, the dangers of anesthesia and preserve the patient's energy. Using psychological methods you will be able to bring your case under the influence of an anesthetic with less excitement and with less anesthetic. This is a well known fact, and the personal influence of an anesthetist, if used properly, counts a great deal. The influence exerted on a patient's mind by psychological methods is a great help in every surgical case. Psychological methods must be used in every surgical case even after an operation. Unfavorable mental influences will delay the healing and convalescence in most surgical cases. Miss Nightingale recognized the value of this and tried to influence the mind of all patients in the operative cases, and her dictum that the nerves of the operative cases "must not suffer" after the operation, is now recognized by all leading surgeons. In all operations you must maintain a favorable state of mind in your cases, and psychotherapy provides the means for the same.

It will not be strange to you, I hope, when I mention that skin disease can be influenced by psychotherapy; yet it is a fact. The mind plays an important part in the production of different skin ailments. Skin disease may be produced by worry, anxiety, fright, shock, etc. You all know that you are able to produce a tingling and a hyperemia of the skin by giving attention to a certain part of the skin. What is blushing but a mental influence on the skin? What are the peculiar tremors and creepy feelings of the skin during sudden fright, but the result of mental influence? Urticaria, eczema, herpes, will come after worry or fright, excitement or some other mental disturbance. The cure of all these cases can not be accomplished unless you first remove the purely psychological or mental cause of these affections, and the psychological method is one of the greatest advantage in these cases.

Facial neuralgias will come on after prolonged trouble, worry or mental anxiety, and you can not accomplish a complete cure unless by psychological methods you produce first a tranquility of mind and eliminate all worry.

Pruritus—that cursed enemy—what hours of torture it gives to the sufferer! You all have had cases which persisted and resisted all your treatment and methods. The influence of the patient's mind is a very important factor in all pruritus cases. Anxiety and worry will make them worse, and peace of mind will hasten the recovery. I have always claimed that all skin disease must receive not only local treatment, but the general condition of the patient must be considered and psychotherapeutic measures used in all cases.

Diabetes: Diabetic patients are made worse by worry and troubles of any kind, and in all these cases it is necessary to establish and to maintain a normal psychic and nervous condition with a cheerful mind, and psychotherapeutic measures should be used for this purpose. This same may be applied to Bright's disease.

Amenorrhea is a peculiar condition. It may be produced by many different causes. Indigestion, lack of nutrition and many other conditions will produce it, and yet in most of them there is a psychic element, which can be regulated by psychotherapeutic measures. It stands to reason that if the mind can cause the menstruation to stop, that the same mind, put in a favorable state, will bring the menstruation. I am not against the use of the necessary medicaments; far from it, as I use many of them; but the patient's mind must be influenced if you desire prompt and lasting results. The same can be said of many cases of menorrhagia, and the employment of psychotherapeutic principles have helped me to relieve many cases which were supposed to be incurable.

Heart disease and mental influences are well known. Worry and trouble produce more serious symptoms in heart patients than in other sufferers. The proper influence of the mental conditions of these patients will improve to a certain extent all your cases. When you reassure a "heart" patient of the harmless nature of his disease, you aid him a great deal in establishing a cure, if such a thing is possible. Even in the most serious and desperate cases the assurance of your patient that he or she is in no danger, will greatly improve his or her condition. Save all your heart cases from emotions of all kinds; keep the bad prognoses in heart cases to yourself, and do not inform your patients. Psychotherapy, by taking charge of these patients' minds, does what no other remedy can do. The treatment of angina pectoris and the pseudo angina can not be complete without psychotherapy. After you have afforded relief from the attack, the worries as to the future must be eliminated by psychotherapeutic measures.

The treatment of all psychoneuroses, most of which are the result of the failure to educate the individual in the proper guidance of his powers of mind and body, are by psychotherapeutic measures, which are moral education, physical education, prophylactic education, as well as the employment of suggestion, hypnosis, exercising your will power over the power of the

other individual to overcome the harmful effects produced in his condition, are and must be used.

The time and space allotted to me in this address do not permit me to go into the psychotherapeutic treatment of such diseases as lumbago, sciatica, Graves' disease, chorea, hysteria, neurasthenia, ataxia, tics, insomnia, digestive affections and many others, all of which can be benefited very much by psychoanalysis and the use of psychotherapeutic measures.

Psychotherapy has a field of its own, and does not require you to do away with your other measures for the treatment of disease. Psychotherapy is an adjunct to all methods of treatment. It can be used, and it can be abused. If used skillfully and judiciously, it becomes one of the greatest powers for the benefit of mankind. It places in our hands a therapeutic measure which will often perform good work where other measures have actually failed. Especially would I ask you not to overlook the value of this method of treatment in the chronic cases, and your so-called invalids give you a great field for this particular method of treatment. All patients must be taught to use their minds as well as their bodies.

910 St. John's Place, Brooklyn, N. Y.

PATHOLOGY AND TREATMENT OF CHRONIC JOINT DISEASES.

J. H. Huntley, M.D., Lima, Ohio.

In the endeavor to write a paper on the above subject, I wish to fully explain in the outset that an exhaustive rehearsal of the subject would mean more time than could be couched in one journal article. The day has arrived when there need not be a very great amount of speculation on local diseases of the knee joint.

Research work by orthopedic surgeons, experience of doctors who constantly care for joint disturbances, pathologists whose conclusions are and have been based on microscopic findings, make the subject I am dealing with a fixed factor when compared with what we knew of these ailments twenty years ago. Many a limb was sacrificed in the far past in order to save a life that can today be handled with a degree of certainty, showing that facts are born of experience and investigation. I believe that surgeons of half a century ago were conscientious in their endeavors to save life and limb. Their shortcomings only foretold the age in which they lived. The doctor who in that day would absolutely immobilize a limb for six months was thought to be cruel and ignorant. The liniment, the poultice and the passive motion have long since died, and in their wake we have local germicides, immobilization and complete rest.

Classification, pathologically speaking, may be grouped under four distinct heads in their primary manifestations:

1. Those affecting the synovial membrane.
2. Those affecting cartilages.

3. Those affecting the ends of the bone.
4. Those affecting primarily adjacent structures to the joint.

Mostly one of the distinct classes mentioned is prominent in the primary onset of the disease, but soon becomes mingled with one or more of the other classes, making it a confirmed affection. The synovial membrane may become chronically affected by a continuation of an acute attack, or it may be primarily sub-acute. After persisting for a time the synovial membrane becomes thickened, with increased secretion and a retrograde metamorphosis of connecting tissue. This retrograde condition may serve to set up unhealthy granulations and may attack the bone or cartilage in its germicidal travel; or, as in rheumatic arthritis, it may continue to confine itself to the synovial membrane. We have a serous synovitis that is chronic, as in hydrops articuli, non-purulent. A certain amount of fluid is always present, and some cases show no pathological change except this fluid. Such cases were at one time held to be non-inflammatory, like hydrocele, but such views today are not well taken. The laboratory has shown that the fluid contains more mucus and albumen than the ordinary dropsical fluid.

The synovial dropsies are now taken as inflammatory processes of low order with slight tissue change. The simple dropsies of the joints should not mislead us, as frequently they go on to positive tissue change. We may have hypertrophy of the synovial fringe, thickening of all the adjacent membranes. We also have gradual degeneration, which will often lead to purulence and destructive invasion. If effusion is extreme we will have stretching of the posterior and lateral ligaments, with loose and lax joint conditions. Sometimes thickening of the cartilage will be found to such a degree that bony plates will be found in the joints. The synovial membrane will become thickened and encroach on the cartilage, the same as pannus does on the cornea. This is simply an extended condition of what we have described above. Thus conditions do not always become purulent, but sometimes do. The ending of such a case of synovitis may be by resolution, or in an obstinate condition of persistent disability, with over amount of lateral motion. It is always possible that this condition is tubercular, but the condition described may and does more often exist—that is, non-tubercular. Where foreign and hard bodies are found in the pent up fluid, such as rice or melon seed bodies, this increases the liability of tuberculous suspicion. In these days of laboratory diagnosis, where the microscopic findings are accessible, with our clinical experience of today much is expected of us. Conditions as above mentioned, coming on very slow, are often unexplainable in their causes.

Gonorrheal rheumatism should not be overlooked as a possible cause for these joint affections in the male. Gonococci are to be found in the effusion, and the history of gonorrhea may serve as a cause for microscopical examination.

Chronic purulent synovitis is only a continuation of the serous form, speaking of it as a primary disease. We can have chronic purulent synovitis as secondary to ostitis, or traumatic infections.

DISEASE OF THE CARTILAGE.

Primary disease of the cartilage is rare and infrequent. Many causes are apparent for this, the most prominent of which is the anatomic, or rather the histological make-up. Cartilage is a structure of low grade, non-impressible and non-vascular. It is slow in its reaction, late to be impressed by inflammatory deposits, and slow to take on fatty degeneration. As it is non-vascular, it is slow to take on secondary infections, and almost proof against primary invasions.

It is a bluish white opalescent structure, void of nerves and almost of blood supply. It is surrounded on one side by the synovial membrane of the joint, and on the other by bone. It receives all its nourishment from these two structures and will live some time after its source of supply is necrosed before it degenerates. Hypertrophy of cartilage is sometimes found, but is secondary to rheumatoid arthritis. Atrophy of the cartilage is sometimes found in old people as a primary condition. We may have primary degeneration, with fatty deposits of the cartilage in some forms of gout. We may have deposits of ivory-like bodies which are almost identical with true cartilage, histologically speaking, which find their way to different parts of the joint and sometimes entirely spoil the easy motion, giving rise to great distress and disuse. Such bodies are known as floating cartilages and may be present without any other diseased condition.

Primary inflammation of the cartilage is denied by some authors and conceded by others. The etiology of secondary inflammations is sought for by the primary disease which preceded it, and is often found in gouty troubles.

What interesting features found in this class of joint disease are the loose bodies found in the joints! These bodies are mostly fibrous and of the same structure as the cartilage, but not always; they are sometimes lipomatous. These are of a softer nature, and, while they encroach on the cartilage, they are not so apt to cripple its workings as the harder, fibrous variety. Neither have they as much movable latitude.

CHRONIC JOINT DISEASES BEGINNING IN THE BONE.

This part of the classification I have used in describing joint diseases is of great importance. This might be divided into degenerative changes and formative obstructions. The latter can hardly be called a type of disease, and yet the exostoses which occur in joint vicinities must be looked upon as pathological, inasmuch as they hinder free joint movement and are surgical in their treatment.

I will not dwell on the formative obstructions of joint motion, as they all come under the head of articular exostoses, but will dwell more on the degenerative changes.

We may have as a primary disease a true ostitis, or a periostitis, or an osteomyelitis. We may have a malignant disease of the shaft of the bone, near the joint, as an osteosarcoma. All these can become chronic before the patient is aware that his trouble is of a serious character. We first have a

hyperemia of the bone circulation. We next have a fatty degeneration of bone cells. These in themselves form mechanical reasons for any amount of degenerative changes. This feature of disease forms itself near the spongy ends of the long bones, often at the junction of the epiphysis, and sometimes under the periostium near the joint. There are various names given to these many formations. However, the starting point may be obscure, it is necessary that we learn to differentiate malignant conditions from those of tubercular type. The miscroscope is the safe guide and should be used in all suspected cases.

The first you will notice is a hyperemic condition on the shaft of the bone near the joint, not involving the synovial sack. The surrounding tissue will look baggy, with no indication of pus in the soft parts. The patient will sometimes complain of pain in the onset, but not often unless the periostium is involved. Where we have very little pain we may presume we have a true ostitis or an osteomyelitis. Could the bone be seen at this time we would find a cheesy degeneration. Later we would find nodules filled with soft, degenerated tissue in which would be found spiculæ of bone. Occasionally at this point, where a patient has great resisting power, resolution will take place, reorganization will occur, and a small abscess will burst through the soft parts and the disease stop without great destruction. This fortunate occurrence is, however, so seldom that dependence upon it is bad judgment. At other times the first diseased focus may be absorbed and a cure occur. More often, however, the invasion goes on, breaks through the epiphysis and invades the true joint.

Infection of the joint almost always takes place, even though the focus of disease is sometimes quite distant. In non-strumous persons there is often a great effort in nature to supply the degenerated bone tissue, and a new formation will start up and entirely surround the necrosed bone. The seat of disease is often very close to the epiphyseal line and the joint will not suffer for some time, but sooner or later the inflammation will extend beyond the epiphysis and joint destruction will begin at once. When once the pus has broken through the cartilage, destruction of the joint goes on at a rapid rate. It matters little at this stage whether the trouble began in the bone or in the synovial sac, the clinical aspect for destruction is the same. Any amount of destruction is now within the bounds of expectation. I might speak here of arthritis deformans as coming under the obstructive class. The reason I did not make this more prominent is because it is a mooted question whether there is true bone deformity or whether it should be classed under hypertrophy of the cartilages. It is believed by most authors that arthritis deformans is not a bone deformity, but is a cartilaginous development. The fact, however, is established that it is rheumatic or gouty in its origin. Whether this is bony or cartilaginous in its mechanical obstruction to the joint matters very little when treatment is taken into consideration.

While I feel that I have dwelt very briefly on osseous classification of joint diseases, yet I also feel that a longer dissertation of the pathological

changes would be of little value to the doctor who has a case under advisement. I will now dwell very briefly on the last of my classifications.

Diseases of joint depending on pathological changes of the soft parts that are periarticular are not very common, yet are met with. Joint ailment may be the local manifestation of a constitutional disorder. Gout, rheumatism, tuberculosis or many troubles coming on from low resisting force.

Rickets I have failed to mention; and yet they often involve the joint, but more often the shaft of the bone.

Strumous joint troubles often begin in some of the ligaments and are carried to the joint by continuity of structure.

Accidental sprains in which muscles, blood-vessels and nerves are involved, often result in joint troubles following highly inflammatory processes.

This part of my classification is not as important as the others, yet traumatisms outside of the articular structures often lead to joint invasions.

Tertiary syphilis, as tabes dorsalis, often brings articular disturbances that are a serious hindrance to good joint action. With this amount of descriptive pathology I will now briefly review the present day treatment.

There are a few points in diagnosis that must actually be learned before intelligent treatment can be carried on. We must be able to differentiate bone disease from affections of the synovial membrane. We must know malignancies from simple disorders. We should be able to tell a tubercular ostitis, or synovitis, or osteomyelitis, from one of simple form. Each clinical manifestation will ask for different treatment.

Treatment of chronic joint diseases may properly be divided into two general classes—local and constitutional. Constitutional treatment is provided in many ways aside from internal medication. Climate, water, environment, exercise or rest, has much to with patients who have struma. Good food and plenty of it is also one of the essentials. The salicylates, the iodines in the form of syrup hydriodic acid, iron, strychnia, arsenic and remedies along this line. Syrup hydriodic is always a favorite remedy in cases where the iodides are thought necessary.

Constitution remedies can do very little in cases where the body is suffering as a secondary manifestation of a local infection. Yet it is very important that the general condition be looked after, and as there is no specific for such local trouble, your internal medicines must be prescribed after very careful investigation of each case. Local treatment is the important feature in the case and should be guided by very great judgment, and you should know whether you have a case of synovitis, arthritis, periostitis or ostitis. You should know whether it is rheumatoid, syphilitic, gonorrheal, tubercular or simple inflammation, or possibly traumatic in origin. All these things have a great bearing on the treatment.

It is impossible for me to lay down any set of rules to govern the treatment of chronic joint diseases. Every case is a law unto itself and calls for very great discrimination in its treatment. Most cases, without regard to

their origin can be classed under three heads—good drainage and aseptic or antiseptic dressings.

When I speak of rest to a joint, I do not mean that the patient shall stop his exercise or moving around, or that he or she shall be put to bed or on crutches. I mean by rest that the joint shall be put to absolute immobility. This is the only way a joint can be put to rest, and unless this is accomplished and the inflamed joint surfaces stopped from grinding on each other, muscular spasm with pain will continue. This can be done with splints or plaster paris cast. If you have a synovitis or arthritis of any of the joints of the long bones of the arm or leg, and you have reason to believe it is tubercular and no bone lesion, you would at once put the limb up in a plaster dressing. Should there be a synovial dropsy, and your joint is not affected, you may aspirate the dropsical sac and inject it with pure tincture of iodine, and after a few treatments of this kind, if no relief follows and the sac refills, you should incise the sac freely and keep packed with gauze until the space is closed. Sometimes these synovial sacs have to be dissected out entirely, then pack the wound until healed. In simple synovitis, where the sac is opened the joint need not be immobilized, but the patient should be kept at rest. Where there is any arthritis the joint should be fixed. Should you have a purulent synovitis or arthritis, the joint should be opened at once under the most aseptic precautions and washed out with a 5 per cent. carbolic solution, or 1 to 2000 bichloride, or a 10 per cent. iodine solution, then packed with iodoform gauze. If there is lots of pain, a fixation splint should be applied. Daily cleansings are necessary. Should you have an ostitis from any cause, or an osteomyelitis, this should be opened at once and any necrosed bone removed and curetted thoroughly.

For me to give the necessary steps covering all cases of joint disease is impossible. All cases, however, come under the general conditions of free drainage, aseptic dressings, complete rest. Many limbs can be saved that were once sacrificed. Most knee joint cases go on to amputation to save life, under the old management, but almost all can be saved if seen early. Hydroarthrosis or white swelling was once thought to be fatal to limb, but is not now, under the recent mode of management.

I have said very little about the treatment of floating cartilages, but will say here that it is strictly surgical and should be done under the strictest aseptic precautions. There are so many things I should like to say of the different types that come under the head of my paper. Hip joint disease should have a paper of itself. The description of the various mechanical methods of treating morbus coxarious would take a whole evening alone. Yet what I have said will apply to all joints.

Don't treat a purulent joint without first evacuating the pus.

Don't immobilize a joint until it is free from necrosed substances, if such is suspected.

Don't put off operating on a joint after you know you have dead tissue either in bone or soft part.

Don't make a small opening where a large one is needed.

Don't wash out a cavity through a small sinus, thinking you can heal it.

Don't operate on a joint case unless you do it thoroughly and under clean surroundings.

Don't use peroxide of hydrogen in any joint case.

Don't compromise with any patient and allow him to dictate to you what should be done in a joint case, unless he knows more than you do.

Don't treat a chronic joint case without first having a Wassermann test made of the blood. If the test is positive, give the regulation dose of 606 every month until your test becomes negative, without regard to what you are doing locally for the joint.

ERYSIPELAS, ITS IRREGULARITIES AND TREATMENT.

O. C. Baird, M.D., Chanute, Kan.

By erysipelas we mean a violent inflammation of the lymph channels. It may be superficial or deep. By the irregularities we mean those remote symptoms and conditions with an origin streptococcic in nature, having the miscroscopical symptoms but lacking in many symptoms physical and perspective. By treatment is meant, not everything that has been tried in erysipelas from camphor, chloral, ichthyol, collodion, hydrochloric acid, calomel, redlight, absolute alcohol, hot air douche, chlorinated lime, paraffin ointment, sodium thiosulphate, or sodium nucleinate, bichloride, or biniodide of mercury, lead and opium wash, sodium salicylate or buttermilk, but the treatment most positive, that which is indicated and which you have observed as being quickest and most effectual, leading us back to the Eclectic treatment of erysipelas.

There is only one disease with which erysipelas can well be confused as to appearance—that is, erythema—while any one who has seen and carefully examined a case of erysipelas can not even in the dark be deceived or mistaken in the diagnosis. Close your eyes, pass your finger over the part affected, and if by the sense of touch you can detect the elevated margin of the erythematous region, then the disease is erysipelas. This applies to erysipelas in its commonest and superficial form only. If you can not detect this margin, then it is erythema. Erysipelas varies as to intensity in different patients, depending largely upon previous physical condition.

There are some writers who consider this disease very rare in elderly people, and this is generally taught in the classical text books, and it is far from true.

In the *McCauley British Medical Journal,* February 26, 1910, it was observed that about 5 per cent. of all cases of erysipelas were senile, and have a very high per cent. of mortality, due to the fact of small resistance. Such cases are very largely also afebrile, twenty-nine out of three hundred and twenty-four in one year having no fever, which is only an irregularity.

The new-born infantile case of erysipelas has been thought to be very rare, yet you and I have lost cases of erysipelas in new-born babies. The

infection seemed to spring from the solution of continuity at the umbilicus, the germs entering the tissue and are not opposed by the lymphatic glands with sufficient force, as phagocytosis is in a degree absent in the new born. This disease is a very fatal one to the new born. As the disease would seem to yield on the extremities it would immediately attack other portions of the body, finally through the ears to the Eustachean tubes and throat, and affecting the brain or other vital parts. This is another irregularity.

The cause of erysipelas is not always easily apprehended, as the erythema may be immediately surrounding a slight wound, yet it may be so remote from the point of entrance and infection that it is next to impossible to ascertain this point. A case is on record in which a judgment of $5,000 accident insurance was granted on the plea of accident, the death of the insured having been caused by erysipelas due to a slight injury on his cheek in the form of a slight abrasion which resulted in traumatic erysipelas, the erysipelas being apart from and separated at a long distance from this trauma.

Erysipelas attacks the face very often. In the observations of Teissier 62 per cent. of all cases of erysipelas were on the face for no other reason ascertainable than that there is a prevalence of catarrh and catarrhal conditions and kindred affections of the mucous membranes of the nose and throat. The streptococcic infection takes place through these abrasions and is carried remotely to the skin of the face. The large number of lymphatic glands in the face makes this possible.

Twelve years ago the writer had a case of puerperal septicemia, due to no other cause than that of an erysipelas patient entering the lying-in chamber. This woman in a very few hours developed a fever with an odorous discharge and suppression of the lochia. The treatment which was suggested was that of slight curettage and douche, in the administration of which there was an infection of a hangnail, resulting in a very sore hand with general inflammation and the suppuration of both middle ears, the discharge from which was streptococcic. The discharge from the sore hand also was streptococcic. My nurse was attacked with a violent erysipelas of the face showing streptococcic findings. The lady who nursed her was also attacked with the same condition, and is today, after twelve years, afflicted with an osseous degeneration of the bones of the head with a chronic streptococcic discharge. This is another irregularity of erysipelas.

Erysipelas is a violent inflammation of the lymph channels, caused by the streptococcus, although it is now generally conceded that the infectious agent, as described by Fehleisen as the cause of erysipelas, is identical with the streptococcus of suppuration. The symptoms of erysipelas are sufficiently different to warrant a description of this infection as a form of affection separate from ordinary suppuration. The characteristics of such pus is creamy in appearance and consistency and sour in odor. It has been proven that the virulence of the streptococcus varies materially with the nature of the soil upon which it grows; that it will even acquire a greater virulence when the resistance of the subject is lessened, as in tuberculosis, diphtheria, scarlet fever, smallpox, typhoid fever and influenza, or when the

vitality of the body is materially reduced, as by overwork, is generally admitted. In the so-called idiopathic cases it is probable that in most cases we should seek for the cause in the air-passages of the patient himself. The streptococcus and the pneumococcus are practically always present in the normal nose and neighboring cavities.

Case of a healthy girl of sixteen, attending a woman who was suffering with a severe attack of erysipelas of the face. This girl was suddenly taken with a severe peritonitis and succumbed on the fifth day. The autopsy revealed an acute streptococcic seropurulent peritonitis, but no perforation. The genital organs were normal. This and several other cases known to the writer indicate that erysipelas may be contagious during the prodromal stage, and that it may induce an isolated peritonitis, and that both the erysipelas and the peritonitis may have been drawn from the same source.

Pregnant women, regardless of severity of the attack of erysipelas, very seldom abort. However, if the attack remains until parturition, the danger comes.

As to the treatment, I would say it is very simple. If we use this rule, viz., detect the specific indications and administer the remedy, the result will be satisfactory, and this is the case usually in Eclectic practice. As to local applications, there are many recommended. I can think of none other (because of its long and successful use in my hands) better than the perchloride of iron tincture and glycerine, equal parts, for local application. The indication for it being pain at base of skull. Paint wide of the erythema. The remedy that is indicated by the white, slick, slimy, coated tongue. The rhus tox by the strawberry tongue and the erythematous redness. The veratrum by the full, bounding, throbbing pulse. Gelsemium by the headache, sleeplessness and flushed face. If there is a pain at the base of the brain, which is quite common, some form of iron internally, Quevenne's iron preferred. Keep the part covered by a moist cloth.

Dr. Gordon Williams, of Williamsburg, Pennsylvania, speaks very highly of honey as a local application in erysipelas, stating if applied on gauze it is very soothing, has nourishing properties for the skin, and where it is very close to the eye, or in the hair, it has a very splendid and soothing effect.

There are those who are using the concentrated solution of magnesia sulphate (one ounce of the salt to a pint of boiling water) with a few drops of carbolic acid. Either of the latter two applications may be of use where the iron and glycerine are contra-indicated from tenderness and irritability of the skin.

The erysipelas, I will repeat, it seems to me, more than any other disease, should be treated according to Eclectic principles and along Eclectic lines.

DISCUSSION.

Dr. Frank J. Neifer, South Bend, Ind.: I had a doctor remove a little cyst from my ear, and I do not think he cleaned the knives or the surface. In three days after I became infected, my face swelled, my eye closed, I had an abscess in my eye and my ear swelled up and became purple. I called Dr. Vitou and he used a local application of veratrum with five drops of

formaldehyde to the ounce, and we got good results. Of course, I took echinacea, ten drops every hour.

Dr. W. R. Schussler, Orland, Ills.: For the last thirty years I have had experience in treating erysipelas. Some of the first cases I was called upon to treat when I started were erysipelas. In my neighborhood there had been an epidemic, and a great many of the older people had lost their eyesight. I tried the ordinary remedies that I could glean from the literature I had at hand, but my success was not very good. Then I met an old lady who had been through this epidemic years ago, and she told me they used sugar of lead then, so the very next case I used sugar of lead. I would put up twenty grains of sugar of lead, two ounces of glycerine and two ounces of water. This was applied to the inflamed area every hour with a feather or camel hair brush. In addition I made a solution of sugar of lead and water, perhaps ten or fifteen grains to the quart, and saturated a cloth and laid it over the inflamed area. That will check erysipelas so far as a local application is concerned. I have tried every remedy I know of, and nothing takes the place of this mixture. If you try it you will find it so.

Dr. Wesley Van Nette, Clyde, Ohio: At Cedar Point I read a paper on erysipelas, and today I reiterate the same treatment. It is merely to apply carbolic acid, full strength, and as soon as the skin appears white apply alcohol full strength. This stops the pain immediately and you have your case under control. After that apply antiseptic oil. For the itching apply hot water, almost boiling. You will be surprised at the heat your patient can stand. This will give you no ill effect and you will get almost 100 per cent. cures.

Dr. Ivadell Rogers, Pryor, Okla.: I had a case recently that seemed to be brought on by the woman picking cherries and scratching her arm. I want to put this informal question: I used quite a good deal of apis, and I want to know if that relieved the itching. I used full strength iodine part of the time, and ichthyol combined with flexible collodion. I had good success; very little temperature, perhaps two-fifths of a degree. This woman was about seventy years old.

Dr. T. L. Brunk, Alton, Ills.: I use permanganate of potash in these cases. Every case ought to be watched, and should be followed with geranium. I have also treated cases of erythema with geranium with great success. I use tincture of geranium locally.

Dr. W. N. Mundy, Forest, Ohio: There is a question that arises in my mind whether you are treating erysipelas or erythema. The paper was on erysipelas, and my understanding of erysipelas is that it is a contagious and infectious disease characterized by the usual symptoms of infection. If this be true, it is a systemic trouble, and I think so far as local applications are concerned any good antiseptic will answer just as well as another, and that you do not stay the progress of the disease with local applications. That is my theory of erysipelas, and I have wondered whether you are treating erythema, which is a localized skin trouble, while erysipelas is a systemic, infectious disease. I am a firm believer in specific medication, but I am a firm believer also in a man being a good diagnostician, and when we treat our diseases we must not misname them. Be sure you are treating erysipelas and not erythema.

Dr. C. L. Sievers, Iowa: I have had the best results by using a solution of iron, and I suppose the tincture would do. The solution is four times as strong as the tincture. Use one-third of the solution, one-third alcohol and one-third chloroform, and paint it on. But you must not stop there. Give

them veratrum and plenty of jaborandi and give them a good sweat, and that will break up the worst attack ever known.

Dr. A. J. Cornell, Chicago, Ill.: I concur fully in what Dr. Mundy has said. Just diagnose your case and treat it according to symptoms. I think local applications are good, and any good antiseptic is as good as another. I think that in those cases where you use local applications only, it is really Nature that takes care of it.

Dr. C. M. Neldon, Ohio: Did I understand the doctor to say that in all cases he palpated the region to see whether there was an elevation of the margin? In all such cases I keep my hands off. First, I like to protect myself, and also the other patients I have. I do not believe a man has a right to palpate an erysipelas case to confirm his diagnosis.

Dr. J. D. McCann, Indiana: I question the statement that erysipelas, if left alone, will be taken care of by Nature. If you have a real case of erysipelas you had better get after it with all the power you have, rather than let it alone and let Nature take its course. I have had it several times myself, and once it knocked me out for six months. I did not treat it; if I had I would have been better off. I never keep a patient with erysipelas in bed over two weeks, but I think that the most aggressive medication you can give, internally and externally, is the thing to do.

Dr. Cornell: I did not say a case would get well without treatment, but you must not depend on local treatment. If you administer internal treatment I think Nature will be responsible for the case getting well.

Dr. Harris, Iowa: I have tried out local applications and internal medication, and I find by using serum I can head off a case of erysipelas in about one-fourth the time it takes for internal or local applications.

Dr. W. E. Kinnett, Peoria, Ills.: I have had some experience in erysipelas, and there is one remedy that I have not heard mentioned, and that is the use of diphtheria antitoxin. If you have never tried it, try it. Next to that is pilocarpine. But I treat with the remedies indicated, whatever they are. I think most of them have been treating erythema and not erysipelas.

Dr. O. C. Baird (closing): Several of the cases that have been mentioned, I agree with Dr. Mundy, were probably erythema, with itching and redness and small temperature. The paper says if you have any difficulty in diagnosis, close your eyes and pass your finger over the elevation. The doctor could use rubber gloves. A man who is blind can diagnose the commonest form.

As to the remedial treatment, I firmly believe that here is a place for internal medication as well as local. Sugar of lead and iron in its various forms are good, but together with the local applications we must recognize the systemic trouble, the fearful infection—one of the worst in surgery and obstetrics. A man who is treating erysipelas has no business to do obstetrics or any kind of surgery without the greatest precautions.

FRACTURES OF WRIST AND ANKLE—COMPLICATIONS AND CURE.

J. E. Holman, M.D., Indianapolis, Ind.

In choosing the above subject I have done so for two reasons: First, because it is a subject upon which I have had a great deal of experience, and, second, because I wish to learn more about it. No physician has ever writ-

ten upon a subject about which he feels so confident of his subject-matter but what he is enlightened materially by his research upon the subject.

I have in the past three years seen and treated some one hundred cases of fractures of wrist and ankle alone. I have treated likewise many fractures of leg and forearm, including fractures of tibia, fibula, Pott's, Colles', ulna, ulna-radius combinations, but the point I wish to make is that a greater percentage of fractures of arms or legs that I have treated have been in bones which are, or form, a part of the wrist or ankle. This may be either a coincidence or to kind of work done, as the greater part of such cases were derived from the automobile industry, especially in the manufacture of army trucks. The causative factor in the production of such in most every case was one of direct force, which undoubtedly accounts for the greater percentage I have had of wrist and ankle fractures alone.

Three examples of cases I have in mind to illustrate the cause of such fractures: First, in block test room, cement floor, room filled with trucks, a truck backed up on the heel of a man, resulting in the fracture of the os calcis; another upon the side of his foot with a fracture of the astragalus; third, a heavy body riser falls on the wrist of the patient, fracturing the scaphoid bone. Physical examination of the injuries would usually reveal a fracture, but the complete diagnosis was made in all cases from X-Ray plate. In the last decade the findings of the X-rays and the clinical observations which they have stimulated and made possible have brought to our knowledge in detail many lesions of the carpal and tarsal bones which were heretofore unknown or known only incompletely and as of rare occurrence.

The anatomical and physiological complexity of the carpal leads to a corresponding complexity of the traumatic lesions which occur in it and of the combinations which may be produced in accordance with the many variations in the direction, extent and prolongations of the force which produces them.

Fractures and dislocations of the different bones which compose the carpus and tarsus may occur simply or in various combinations, and while some of the single injuries and some of the combinations occur frequently and regularly enough to justify systematic description, others are so few or so variable and so dependent upon varying mechanical conditions that they defy analysis and classification and must be recorded only as isolated facts.

The most frequent lesions are fractures of scaphoid and dislocation of the semilunar in the carpus, and so far as I am able to discern from available literature, fractures of the bones of the tarsus occur with almost equal regularity. An unlimited number of various combinations of fractures of tarsus and carpus may be encountered, but time can not be devoted in this paper to such complexities.

Diagnosis.—The correct diagnosis of any fracture of tarsus or carpus is often difficult. These fractures can generally be recognized by local tenderness, mobility and crepitus. In these fractures an X-ray examination is often necessary to arrive at a correct diagnosis; in fact, in all injuries about

the ankle the X-ray should be employed as a routine practice. Regarding prognosis in fractures of tarsus and carpus, it may be said that the result of treatment is generally unsatisfactory. Ely, in *Annals of Surgery*, 1917, has shown that a large percentage of the cases have more or less permanent disability. The causes of the disability are limitations of motion and persistent pain in walking. One of the most frequent causes of pain is the presence of a fragment of projecting bone or exostoses in the soft tissues of the heel; another is the formation of a mass of callus beneath and about the top of the external malleolus, to which attention has been called by Cabot and Binny.

Treatment.—In the treatment of the bones of the carpus and tarsus it is most important to restore the fragments to their normal positions and hold them securely until union has taken place, for it is only in this way that the normal arches can be maintained.

As a means of immobilization and support I prefer the simple splint well padded with cotton and one or more thick layers of cotton about the injured member and all secured firmly, while fragments are held in position with or without tension on the parts. The use of plaster of Paris as usually put on constitutes what is commonly called an over-treated fracture, due to the fact, as you all well know, to the inability of a plaster cast to maintain the fragments in position when the cast becomes loose as the swelling subsides. Here is where the old splint and roller bandage can easily be removed and parts examined and redressed sufficiently tight that fractured parts can not be separated. Sometimes a plaster of Paris splint may be made for the anterior and posterior which conforms to the anatomy of the part. A lint gauze is always applied to the skin to protect it from the plaster. Various contrivances and appliances have been made according to the notions and ideas of many surgeons, but simplicity rules as far as appliances are concerned. Most all authorities state in their treatment that the first indication is to prevent a too severe inflammatory reaction if it threatens, and with this object the hand or foot should be kept at rest in an elevated position for three or four weeks. Cases where passive motion was restored too early did not do well.

However correct these authorities, and however true all they tell us, with a few stiff joints which make chronic complainers and poor business getters, one is prone to do something else. For instance, if the doctor on the case before you used ice packs with no results, why use hot packs, of course.

All this has led me to the following in the treatment of joint fractures (taking for granted that they are not too comminuted): I examine my fracture every day or every second day by removing the bandage and splint, gently holding the fractured member and apply tension if necessary, and direct the patient to begin about the third day to move the fingers and continue to increase the movement both in and out of the splint to as great an extent as my better judgment directs. The hot water baths aid materially in the relaxation of sticky joints. There are a few cases when open operation

and removal of a part or all of a bone becomes necessary to overcome stiffness and increase efficiency. In conclusion let me say I favor and use passive motion as early in the case as conditions permit. In so doing I have had excellent results.

DISCUSSION.

Dr. T. L. Brunk (Alton, Ill.): I had a case where a boy caught his foot on a wheel and broke the tibia, and by this means of treatment he is today running around. I want to compliment the young man on his line. I think he has original ideas, and that is what we are looking for.

Dr. J. H. Burnett (Fostoria, O.): I agree with the young gentleman as to the treatment of fracture of wrist and ankle, and I thoroughly agree as to the splint. A very good splint is to take a heavy piece of pasteboard and have it well padded. Remove it every three or four days and look at the fracture. I have used this and have never had a stiff joint, and I have practiced medicine for thirty-eight years.

ECLECTICISM—SPECIFIC MEDICATION.

Wm. P. Best, M.D., Indianapolis, Ind.

Every physician has two primary objects in his profession, alleviation and cure of illness, and a living for himself and family. In order to have the greatest success in life he must, therefore, be liberal in his thinking, progressive and accumulative in his professional work. We should be firm in our convictions, positive in our conclusions, yet not dogmatic nor egotistic. If we read as we run through life we will daily learn to value the well grounded opinions of others, who have learned valuable lessons which may profit us all.

The history of medicine, up to the present moment, shows a tendency to seek positivism. Efforts to find remedies always producing exact results are more and more apparent, especially in the last few decades. The efforts of the Eclectic fathers resulted in what we happily term specific medication. A brief study of this subject—as we understand and apply its principles—may prove of vital interest.

Syphilis is one of the oldest, most studied and illustrative diseases we may select to elucidate our ideas and develop our argument in behalf of specific medicine. This curse of human health and happiness has elicited the commendable efforts of teachers and thinkers and research workers for as long as medicine is known.

A specific treatment for this disease was finally reached and announced to the expectant profession and suffering victims. We have now a so-called specific for syphilis in arsphenamin (or diarsenol or arseno-benzol). Yet we begin to learn that this remedy—like antitoxin for the cure of diphtheria—has only a specific place for specific conditions, leaving us to supply other remedies to complete the curative process after these agents have produced their full beneficial effects. In other words, arsphenamin meets part of the conditions but does not result in complete or perfect cure, for syphilol-

ogists inform us that mercury must still be used to meet conditions the arsenic compound does not wholly eradicate. Yet we may consistently call both specific remedies, arguing from the standpoint of rational ideas. Arsenobenzol will destroy the spirochete if not too firmly fixed, too deeply intrenched, in tissues difficult of access by even intravenous medication.

While the arsenical and mercurial agents now have recognized fields of specific action, producing positive and specific results in these well recognized conditions, yet the iodine preparations also have a field of action none the less specific, for it is now a recognized fact that by it the germs may be made more accessible to test and treatment. Instead, then, of having *one* remedy for the disease known as syphilis, we have at least three well recognized remedies—each a specific for the conditions research and experiment have proven. So after all in treatment of syphilis we must recognize the conditions in order to specifically apply the specific treatment. In other words, the analytic diagnosis—specific diagnosis—is the basis of any and all specific medication.

The same applies in the treatment of diphtheria. Antitoxin, as the name suggests, corrects the toxic condition which kills. This affords a beautiful and forcible delineation of the specific medication idea. Specific toxic condition—the specific antitoxin. Yet this limitation of the remedy is its positive specificity. We must yet recognize and remove other conditions in the diphtheritic patient to aid nature in promoting end results just as we do in the treatment of syphilis.

These things being true—substantiated by the greatest thinkers and investigators of the day—it is equally easy and logical to carry this thought further and make it apply to our daily practice in meeting other *diseased conditions,* notice the treatment, not names of diseases, but the conditions produced by or developing with or because of disease.

For this purpose we may briefly review the specific action with indications for ten remedies used extensively by specific prescribers. It is but proper to state that these indications for and action of remedies represent the consensus of opinion of many careful clinicians laboring under varying conditions. They serve to guide or direct the application of medicines because the conditions present—the symptomatology—the pathological sign language which speaks to us of the abnormal functions and pathology which we are called upon to interpret and relieve.

Specific Medicine Aconite.—Varied and continued experience with aconite has developed the following indications: A small, frequent, rather hard, sometimes wiry pulse. These conditions are frequently encountered in fevers where the capillary circulation is feeble or atonic, offering greater or less obstruction to free and normal circulation.

Disturbed circulation resulting in disordered functional activity favors the retention of toxic material and prevents natural efforts from producing relief. Thus when there is fever from any cause, with indications given, we may expect favorable action from very small doses, from 1/6 drop to 1/3

drop every one or two hours. On the other hand, wrongs of circulation not only favor retention of toxic material, but such material may, and doubtless does, depend for its production on the abnormal circulation. If, then aconite acts specifically—always—under the conditions above referred to, circulatory disturbance becomes more normal by its influence. We are relieving the system of toxemia, already developed by retrograde metamorphosis, and checking its abnormal development by allowing normal functional activity to be resumed. In a simple, symptomatic fever this may be all that is necessary to make an end of the disturbance, and no nosological term is necessary that we may intelligently select a specific remedy.

Since pneumonia is a symptom complex, at which remedies are frequently prescribed, may we not pertinently ask when and why select aconite in a case of pneumonia? Will it be for the fever, the cough, the excretory derangement, the infection that will remind us of aconite? *No.* The conditions above referred to may be present; if not, do not use aconite, for it is not the name pneumonia for which we prescribe, but the *condition* of the patient.

Let us think of veratrum—veratrum in pneumonia? Certainly, but not when the aconite conditions present—no, very different. Aconite for obstructed, weakened circulation; veratrum for asthenia, evidenced by a full, bounding, active and strong blood current. The *conditions* are so different —yet the disease is pneumonia—the results to the patient may be the same as in the aconite case; disaster if the conditions be not at once relieved and normal action approximated.

Overactivity rapidly wears vitality away; we must not stimulate an already overactive heart, but remove the excitement—without depressing or depleting—and see how nicely nature works for your patient when you aid in checking runaway processes. Once the excitement subsides the vital processes again produce relief. Relaxation, moist skin, relief of hyperpyrexia, moistened mucous surfaces are the evidences of aid in relief of toxemia just as in the preceding case, but for conditions so different that entirely different medication is specifically called for. But we would not make the fatal mistake of using aconite or veratrum all the time, nor together, nor would all cases of any febrile disease call for either. If it did so later on changing conditions would necessitate a change of remedy.

Pneumonia being a common disease, of high mortality according to most observers, may we not study some further remedies—not for pneumonia—but for conditions frequently seen in the clinical picture of this disease?

Bryonia is a splendid specific remedy, but is not called for by any disease, yet it is frequently a remedy—specific—for conditions symptomatic of pneumonia. If the patient presents a hard, vibratile pulse, flushed right cheek, frontal pain extending to the basilar region, a dry, irritative cough, an inflammation of serous membranes—any one of which conditions we may and do find in pneumonia—then it is specifically indicated and produces specific relief. Pleuritic pain, dry cough with hard vibratile pulse, will be promptly benefited, and as these conditions improve we expect the pneu-

monia patient to improve, because he is made more comfortable and the way is cleared for better physiological activity.

On the other hand we have lobelia—a remedy for pneumonia? Well, let us see. The indications for lobelia are like all other specifics worked out at the bedside. We theorize and do experimental work on animals, research work with all its value and suggestive results, but the bedside is the place—the only place—where the results may be studied and where theories stand or fall. Again will we revert to a consideration of pneumonia, and since cough is a very prominent feature of this disease how will we know whether we should use lobelia or bryonia, for both are remedies for cough—not in the same case at the same time, however—at least very seldom would both be indicated at the same time.

Bryonia the remedy for hard vibratile pulse, lobelia for a soft, full, distinctively soft wave pulse; bryonia for the dry irritative cough, a sedative; lobelia for cough of relaxation, oppression or infiltration with oppression, a stimulating but active remedy in small doses short of nausea. Lobelia has a nauseating relaxing effect—decidedly, when used in dosage for such purpose—and while it will in this dose produce relaxation, it does so without marked depression unless the patient is very susceptible or the dose too large. Bryonia conditions are more apt to be present in the early stage and lobelia in the stage of pneumonia after the first stage of irritation and excitement has passed.

Many diseases are perpetuated or exist because of inactive excretion, toxemia, as will be specifically noted by a foul tongue, foul breath, rank odor of excretions from the skin, kidneys and bowels. If we note carefully such conditions we find the specifically indicated remedy suggested by the coating on the tongue or, if it is clean, by its color.

We would not think of giving echinacea in all cases of erysipelas, neither sulphite of soda, yet either one or both might prove specific in this disease.

Had we two cases of erysipelas we might have one of acid toxemia, foul looking, bad smelling, dirty white mucous membranes with dirty or whitish coat on the tongue, indicating a full load of toxic material of acid character. In this case sulphite of soda would act specifically. The results would show in a cleaning tongue, less fever, improved erysipelatous manifestations and general improvement. Sulphite of soda for erysipelas? *No;* but yes, for the condition we have pictured is a case of erysipelas. But erysipelas is a streptococcic infection—yes, but streptococci do not thrive when we improve the body liquids and body resistance. What disease might not develop when the body is almost dead from autotoxemia?

A healthy army is a strong protection, a large asset; but a sick one can not care for itself, much less protect against a foe. But the specific expression of the erysipelatous—the streptococcic patient—may not show the picture just outlined. Mucous membranes may be dark and lifeless, resistance at low tide, eruption dark red, tendency to gangrene, mucous membranes dark red, dry or moist, brown or moist, slick and almost decompos-

ing. This case would do no good with sulphite of soda—really it would be a serious mistake. We would think of muriatic acid dilute, sulphurous acid or echinacea.

When to use one or select the other should not be a matter of guess work. Muriatic acid is best indicated by dry, red mucous membranes; sulphurous acid by slick, raw beef and malodorous tongue membranes, and echinacea when dark discoloration is the marked symptomatic expression.

It is best to use remedies singly or in simple combinations. Multiplicity of remedies given in one prescription or in alternation is usually an expression of confusion or ignorance or lack of care in diagnosis.

A single remedy is frequently the specific remedy for the specific wrong if we diagnose carefully. Echinacea is frequently used internally and externally in erysipelas with prompt and satisfactory results.

I once heard a speaker advise to always "put the stopper in the bottle when two remedies had been put in," thus limiting one's tendency to see too many indications, do too much, perhaps do harm, and if improvement results at all no one could judge what remedy to credit. But when one remedy is used and clinical results occur time after time until the conditions which a remedy will correct are well and specifically understood, we do more good, use less drugs, prescribe more intelligently. Each one may, by careful observation, diagnosis and specific prescribing, help to establish specifics for conditions, either add new remedies, or, better, more direct and specific use for old ones.

ECTOPIC GESTATION.

H. H. Helbing, M.D., St. Louis, Mo.

I am not going to take up your time by dwelling upon the theoretical side of this question, relating especially to causes, etc., but will relate my experience handling three or four cases the past year.

It is a subject that should interest all of us, for it is important that we do our best to make a diagnosis as early as possible in such cases so as to avoid serious complications supervening. We will have difficulty in diagnosing this wrong from normal pregnancy, pyo-salpinx, cystic ovaries or abscess in pelvis.

The first case I wish to relate was Mrs. A. H., age 22, married about five years, and has had no children or miscarriages. She has been suffering with salpingitis for several months and I have been advising operation, as I suspected pus tubes. She came to me last fall complaining of more pain than usual in the left tubo-ovarian region. Says she has missed her menses two months, but it has now come on and she passes clots. At times the pains are so acute as to cause cold sweats and slight collapse. Her suffering is so great that she now consents to an operation.

Upon opening the abdomen we find an ectopic in the left tube, the same being developed to the size of one's fist. There had been no rupture, so the

tube was easily removed. The right tube, being chronically diseased, was also removed. She made a smooth recovery and has had no trouble since.

Mrs. G. D., widow, age 31, entered hospital January 2, 1919, with a history of having had pain in the pelvic region for some time. No clear subjective history could be obtained, but palpation revealed a mass filling the pelvic cavity and extending to the brim of the pelvis. The uterus, only slightly enlarged, was pushed up against the pubic bone. There was a white blood count of 15,200. There being no clear history we were not sure what the mass could be. Upon opening the abdomen we found that we had an ectopic to deal with. The tube on the right side had ruptured some time previous to her entering the hospital, the intestines and omentum had become firmly adherent to the sac, so we merely cleansed out the cavity and put in a rubber dam drainage. In this case the fetal products were entirely without the tube, the intestines, omentum and wall of the pelvis forming the sac wall. The patient recovered readily and left the hospital January 20.

Mrs. A. R., married, age 32; came into the hospital February 5 with a history of having had her last menstruation in October, 1918. She says just before Christmas she had cramps and fainted; became very weak. Palpation and bi-manual examination revealed a uterus soft, slightly enlarged and in the normal position. There is a mass in the cul-de-sac slightly to the left.. Diagnosis, ectopic gestation. Upon opening the abdomen there was a mass in the pelvis adjacent to the fimbriated extremity of the left tube and surrounded by the intestines and omentum; in other words, the intestines and omentum formed the larger part of the sac wall. Evidently the mass had been forced from the tube at the time of her severe pain and weakness. The entire sac was easily removed with the fetus and placenta, and the abdomen was closed without drainage. She recovered and went home two weeks after the operation.

The patient I now present is one in which the symptoms pointed to ectopic, but which proved to not be such. Miss D. S., age 19, has missed her menses three months. She entered the hospital having cramps and was passing large clots. She had an operation two years ago for appendiceal abscess. An examination revealed a mass in the right tubo-ovarian region, the uterus being fixed but slightly pushed to the left. White blood count 23,000. The question is as to whether this is a pus tube or ectopic. The high blood count points to pus tube. The fact that she is single also would lead us to believe this were she not a city hospital patient. The absence of menstruation for a time followed by a menorrhagia and the passing of clots point to ectopic. Upon opening the abdomen we find that it proved to be a pus tube.

When called to a case of ectopic that has ruptured into the abdominal cavity, we will often find the abdominal cavity filled with blood and it requires rapid work to save such a patient. If we have reason to suspect a wrong of this kind in a patient, it is wise to either have them operated at once or let them stay where they may be accessible to a hospital where surgical interference may be instituted at a moment's notice.

BETTERMENT OF CHILD LIFE.

Ivadell Rogers, M.D., Pryor, Okla.

We often hear the question discussed, and sometimes stop long enough to wonder in our own mind whether or not the world is growing better. We answer this question when we make a reply to another question of equal importance. What are we doing for the betterment of child life? The Lord himself when on earth set a child in our midst, calling attention to his interest and love for its welfare. And another time he said, "Inasmuch as ye have done it unto the least of one of these."

I wish to discuss points of interest regarding the health of the child by preventing disease. We have all heard the old, wellworn and time honored saying, "An ounce of prevention is worth a pound of cure." The pound of cure has been demonstrated to the entire satisfaction of the most alert. We have run here, there and yonder in our quest for the essential. Especially have we, as physicians, been most diligent in our microscopical research for new remedies, many of which we laud to the skies and then abandon—remedies for the prevalent diseases and semi-prevalent. Surely the surgeon has gotten to himself great honor for what he has accomplished in his skilled operations, performed with his most adequate antiseptics and rigid antisepsis. Much has been accomplished in the preventable diseases with the serums. And the Alexandrian "worlds yet to conquer" in tuberculosis, cancer, etc.—each is getting its full quota of recognition and research.

But what has been done for the children in the way of preventing disease, or what are we allowing the laity to do in the way of inviting disease? We are only beginning to recognize the "ounce of prevention" part of preventive medicine.

Statistics show that disease of the preventable type is much more prevalent in the country districts than in the city. Typhoid fever, for example, is, comparatively speaking, stamped out in the cities. Quarantine against diseases, rigidly enforced, is a gratifying success. But quarantine in the country amounts to the willingness on the part of the family to obey the orders of the family physician.

The Hughes bill, recently enacted in Ohio, assures the people of the country districts representation on the health board. The purport of this bill is for the prevention of the spread of disease in the small town and country districts. To show you how little was done in Ohio, an old state, where the Hughes bill was enacted, one-half of the population of Ohio is in the small town and country districts, despite the fact that she boasts of the cities of Cincinnati, Toledo and Cleveland. The people of the country were receiving only one-seventh of the health funds appropriated despite the fact that they represented one-half the population. The Hughes bill assures the people of the small town and country districts equal representation on the health board. The bill also provides

for a physician whose business it is to have supervision of the health of the child—eyes, ears, teeth, throat, whether of tubercular tendency, etc. I speak of this to show you what other states are doing. May I speak right here of the great good that is being accomplished by way of activities—playgrounds, military training for all the children, domestic science for the girls, manual training and scouting for boys. Only recently a campaign was put on all over the country, sanctioned and approved by the President, in the interests of the Boy Scouts. Ten million boys between the ages of 12 and 21, with a membership of only 65,000. What an army to enlist for the betterment of the nation! Not many boys but are willing and anxious to enter into activities, if these activities keep them out of doors and busy. We are fortunately now living in an age when not only the small boy is asking questions, but we are all at once and all the while asking "Why?"—and we must know the reason, and we have a right to know the reason. Time was when we attributed the death that occurred in our own home or the home of our neighbor to a dispensation of Providence. Now we know that lack of attention—or shall we call it just plain carelessness—is in reality at the bottom of the trouble. It was not broken faith or sneering statements as to our ability to fight that caused the American people to rise to the height of their indignation. It was the atrocities committed against the children of the war-ridden countries. More tears, with heart pangs of sympathy, were shed over the wrongs against children than were ever shed over the grave of the Luisitania. Are we, who are permitting the diseases to spread that are preventable, to claim exemption that we have no responsibility for the deaths of the 5,000 babies under one year of age—5,000 that died in one year—in our state, Oklahoma? I repeat, have we no responsibility? Often the child is improperly clothed and badly fed through ignorance on the part of the mother.

In this state, public health nurses are chosen for each county district. Among her duties are the instruction of the mother in how to care for the child, and the public how to protect it.

Oklahoma, as a state, is in the forefront in its welfare work. The Lion's Club, of Oklahoma City, entertains the tubercular children, boys in July, girls this month (August). These children were entertained at the Lion's Club camp sleeping under canvas, eating in an open air mess hall—army style. Dr. Moorman, of the Oklahoma City Association, will select the children, and a nurse from the Anti-Tuberculosis Society will have charge.

Tulsa is to have four open-air schools on top of Unit buildings in different quarters of the city. The Tuberculosis Association furnishes the lunches.

Enid had a modern health crusade, held by the children and public health workers. Children marched through the streets carrying banners and slogans, while the adults, showing their interest, lined the sidewalks.

Oklahoma has its special examination stations.

It may interest you to know that Oklahoma alone has 400 discharged soldiers suffering from tuberculosis. Recently the United States Public Health Service made arrangements to care for every discharged tubercular soldier, to be admitted into the army hospitals. I quote from Mary A. Myers, of Indianapolis: "The public attitude toward tuberculosis must be changed. Formerly the masses of the people thought the disease hereditary—that nothing could stop it. Now few grown-ups, due to educational work, do not know that tuberculosis is a preventable and curable disease."

Surgeon B. J. Lloyd said: "The tuberculosis problem, when reduced to its lowest terms, means: The germ of tuberculosis on the one hand, and the new born baby on the other. Inasmuch as no baby is born with tuberculosis, if we can keep the two apart there will be no tuberculosis problem." A child well born can be kept well.

The Kansas State Board of Health began their anti-fly campaign in March. It suggests six points: (1) Get after breeding places early; see that your back yard is free from filth. (2) Keep the fly out of your kitchen. They tell us the female fly can not lay her eggs until after a full meal of rich food, such as butter, cream and sweet stuff. (3) Keep the fly away from the baby. The fly carries germs on its feet. (4) Keep the garbage can covered. (5) Keep traps in the yard catching the pests. (6) Keep a tab on your grocery and meat market. And now another point—don't spit. You have seen the placard—"Ladies, please do not spit on this floor. Gentlemen will not."

The typhoid vaccine campaign, now so urgently advised to the people, is right along this line. You know typhoid is almost unknown in the cities—an unknown factor in the army—proving the efficacy of the sanitation and vaccine. While this is more essentially a protection to the adults, it has its effects on the child as well.

I quote from a little folder given out by the Oklahoma Tuberculosis Association: "Two classes of people keep the contagious diseases going the rounds. One of these is the ignorant class, who do not realize the extent of their offense or the hardships or injustice they work upon those about them. Many of these are too poor to employ a physician. The disease passes undiagnosed, or diagnosis is made after the mischief is done. The other class consists of those who, while they know what a menace the sick member of the family is to their neighbors, do not care. They are utterly indifferent to the suffering, anxiety, inconvenience and maybe even the sorrow of death they may inflict on others. The child next door may fall sick and die, owing to their carelessness, without their feeling the least concern. While the first class may be pardoned because they do not know any better, the second class assumes an attitude that is nothing short of criminal. The big question now confronting all public health authorities, organizations and workers is how to deal with

these classes and awaken them to a sense of their obligation. Education is the one remedy to apply to the ignorant. Prosecution is the remedy that should be applied to those who know, but who carelessly or willfully refuse to take such precaution as may safeguard others from the spread of disease.

Recent experiences have demonstrated that as a nation we need soldiers, men and women strong physically, intellectually equipped, muscle that will hold, patience that will endure, intellect that has gray matter back of it. If we are to have such an army, we must look to the children for recruits. And it is to the instruction and protection of the child that the nation looks as a safeguard for her future interests.

BRONCHO-PNEUMONIA.

JOHN WILLIAM FYFE, M.D., SAUGATUCK, CONN.

In addressing this convention of experienced physicians on the subject of broncho-pneumonia I feel confident that it will be quite unnecessary for me to enter into its diagnosis, and I shall therefore confine my remarks along this line to a statement of such facts as will assist me in elucidating a specific and efficient treatment of a disease frequently seen in children and also in adults whose vital forces are below the normal standard.

On being called to a patient presenting symptoms—disease expressions—suggestive of pneumonia, the first of our activities should consist of making a nosological diagnosis that is free from doubt—not that such diagnosis will materially influence our treatment—but it should always be made for the benefit of scientific medicine and the reputation of the attending physician.

It would seem self-evident that the treatment of bronchial pneumonia should be mild and sustaining—that all depressants should be avoided—if we are to give our patients the best possible chance for recovery, and this is equally true when applied to either of the several varieties of pneumonia. It is possible that a too vigorous treatment has sometimes been the principal cause of death.

In beginning our treatment we always have from the condition of the pulse a safe and reliable guide. If the pulse is small and frequent five drops of specific aconite should be added to four ounces of water and a teaspoonful of the mixture administered every hour, but if the pulse is of medium fullness five grains of ferrum phosphoricum, 3x., should take the place of the aconite. In some cases, however, the pulse will be full, frequent and bounding, making a direct appeal for veratrum as the indicated sedative.

Cases of bronchial pneumonia are numerous in which the heart's action is too feeble to assure a life-supporting circulation of the blood.

In all such cases ten to twenty drops of specific cactus should be added to the sedative mixture in order that the heart may be properly supported, not stimulated, from the beginning of treatment. There is a vast difference between stimulating and supporting the heart. All attempts to stimulate this organ should be made with the greatest care. If we avoid the use of depressing sedatives, however, little need of stimulation will be encountered.

In this wrong of life bryonia is nearly always indicated, and is especially called for when there is evidence of pain in respiration.

In some cases it will be noted that the face is flushed, the eyes unnaturally bright, the pupils contracted, and the child is consciously rolling the head from side to side, evidencing the need of gelsemium being included in the treatment, when ten drops of the specific medicine should be added to four ounces of water and a teaspoonful of the dilution given every hour. In other cases the eyes will be dull and the patient dull and drowsy, when belladonna should take the place of gelsemium.

Great restlessness, sleeplessness and even delirium are often prominent characteristics and clearly indicate a demand for the relieving influence of rhus toxicodendron. It may be combined with the other remedies, or five to ten drops of the specific medicine may be added to four ounces of water and a teaspoonful given every one or two hours.

If the tongue is red and pointed, showing marked irritation and accompanied by a hacking and exceedingly troublesome cough, five drops of specific ipecac should be added to four ounces of water and a teaspoonful of the dilution given every hour, or it may be combined with either of the other mixtures.

In most cases local applications are not needed, but if respiration is especially difficult a very small quantity of libradol may be daily applied to the upper third of the chest.

Hot milk affords a most excellent means of supplying the patient with proper nourishment. Two ounces every two hours will be about the quantity required.

PNEUMONIA.

J. D. McCann, M.D., Monticello, Ind.

Pneumonia, as we have been able to view it the past year, has been attended with lamentable fatalities.

Pneumonia or inflammation of the lungs includes acute lobar pneumonia as well as various forms of atypical and broncho-pneumonia.

In its ordinary form it has been a disease little to be dreaded in my personal experience.

One authority, in describing pneumonia, says: "Acute lobar pneumonia is due to infection by the pneumococcus, usually runs a rapid course, and is characterized by a diffuse exudative inflammation of a

large part of one or more lobes of the lungs. Broncho-pneumonia, on the contrary, may be due to a variety of bacteria, but is usually associated with staphylococcus. Most cases of pneumonia which follow or complicate contagious diseases are due to streptococcus or infectious pneumonia." We no doubt noticed this characterization of the disease in our recent endemic influenza. Possibly there is not much question as to the streptococcus infection in the pneumonias following an epidemic of measles in either civil or military life.

I have noticed, however, in our own community that if we had pneumonia to contend with it is more likely to come along with a break-up in the weather after a long cold spell of some weeks.

It is as well sometimes to record failures as to tell of all of our successes. In October of 1918, with our first outbreak of influenza, I lost four cases. One large woman, who had been sick for six days without medical attention and who was in a dying condition when first seen, with both lungs seriously involved, died within twenty-four hours. Another lady, who had been sick for three weeks when I was called, had developed pneumonia with some mental disturbance and was pregnant two or three months, died despite the efforts of three physicians.

A man weighing 250 pounds was taken sick on Monday. Thursday he sat up in bed feeling fine, when seen in the afternoon, and died before daylight the next morning. When called in the afterpart of the night I think I never heard such a churning of mucus in a pair of lungs as was demonstrated in his.

The other case was a child with pneumonia following influenza, and the only case where I thought there was a fair fight and lost. During the busy months that followed I did not lose a case.

I feel quite proud of my January and February record because one lady 76 years old, with double pneumonia, got well after three physicians who were called in said she would die and for me to make her as comfortable as possible while she lived.

During all those trying times I pinned my faith to and swore by asclepias and bryonia. For a sedative veratrum and aconite or gelsemium was given. In some cases where there was an involvement of lung tissue the undertaker was defeated by the timely use of subculoyd lobelia hypodermically. In other cases, where the breathing became very difficult, there was great relief experienced by inhaling a small amount of ether. This was used in either child or adult.

In some cases when we thought the patient nicely convalescing a pleurisy of the most severe type developed, and by reason of the already weakened condition there was a hard fight to maintain the vitality of the patient.

Years ago Prof. A. J. Howe advocated the onion poultice over the seat of pain in pleurisy, and while many of our medical men smile at the mention of a poultice today, I have not so far forgotten my early

teachings as to eliminate external applications from my method of treatment. Because I am treating pneumonia is no reason why I should confine myself to certain remedies. While I spoke so highly of asclepias and bryonia there are conditions frequently presenting themselves that call for other remedies. I pride myself somewhat on being resourceful enough to have such remedies to fall back on. One of these remedies I regard highly is berberis aquefolium.

When there is a catarrhal condition of the nose or throat berberis acts splendidly. Certain other conditions will call for collinsonia; a croupy condition will call for stillingia or some form of the calcium iodide.

Many remedies might be cited and indications for their use given, but to the man who knows his specific diagnosis and medication further admonition would be superfluous.

PNEUMONIA.

W. N. Mundy, M.D., Forest, O.

The remark was recently made to me by a physician: "Osler's famous definition, 'Pneumonia is a self-limited disease, and runs its course uninfluenced in any way by medicine,' still held good." If this is true, why medicate? Why call the physician? It is this position that is responsible for therapeutic nihilism, and probably in a large measure for the rapid growth and multiplication of drugless healers or cults of every description.

Would not this same definition hold good for all the infectious diseases? When uncomplicated they run a definite course, in fact, are self-limited to the same extent as is pneumonia. Moreover, pneumonia as well as the other infectious diseases has its complications and does not always pursue a definite self-limited course, but has several terminations. Will not—does not—treatment influence its termination? We believe it does, and just so far as an intelligent treatment affects any infectious disease so far does it influence pneumonia.

Osler's definition applies to lobar pneumonia and so does my preliminary remarks.

I am a firm believer in the efficacy of drugs. I do not believe that their correct therapeutical effect can be truthfully or properly established in the beaker glass or upon rabbits and guinea pigs. Their poisonous or physiological effect can be, but not always their therapeutical effect. The blind following of authority in the person of the German pharmacist and chemist has had its full effect upon the American profession, and when the crisis came it left a large portion of the profession helpless and stranded. Its echo is found in the large mortality among the picked men of the nation, the victims of influenza and pneumonia. These men

either received no treatment save cold water and air, or a stereotyped treatment dictated from headquarters and without any knowldge of the condition of the individual patient. I would not have you think I believe it to have been ignorance or brutality. I attribute the short coming to the blind following of self-instituted authority in therapeutics or nihilism and to the system or, if you please, red tape. We point with regret and shame to the terrible mortality resulting from typhoid fever in our camps during the Spanish-American War. The ravages from influenza and pneumonia during the present year is equally as reprehensible and appalling and surely ought to set the profession to thinking, and thinking hard. It is an exhibition of the helplessness of the profession in a crisis. I trust you will pardon me for this transgression, as my subject was to have been "Pneumonia in Children, as Treated and Cured by These Methods."

Osler, from whom I quoted before, says: "It can neither be aborted nor cut short by any known means at our command." I do not know whether you endorse this statement or not; personally I feel we are often enabled to guide or direct the course to a successful termination and especially is this true in complicated pneumonia.

In children under five years of age we usually meet with broncho-pneumonia, capillary bronchitis or lobular pneumonia, though lobar pneumonia may occur.

The former type is usually secondary, a sequence of the infectious diseases, such as measles, whooping-cough or typhoid fever. The mode of onset is different in the two affections, the former developing insidiously during or at the conclusion of another disease; the lobar type setting in abruptly in a child in good health.

Lobar pneumonia is almost always unilateral, broncho-pneumonia bilateral. As my article is presumed to deal with treatment only, I will not attempt to deal any further with a description of the disease but proceed at once to my subject proper. I have nothing new or startling to offer in the way of treatment. My treatment is based entirely upon symptomatic or specific indications. Using a stereotyped phrase, I treat the patient, not the disease. I feel sure, yes positive, it is more successful and eminently more satisfactory than any other method, and is based upon a nearer approach to a true scientific basis than any other.

There are a few remedies that stand out pre-eminent in the treatment of pneumonia in children as well as adults, for we treat them alike. These remedies are aconite, asclepias, belladonna, bryonia, gelsemium, ipecac, lobelia, phosphorus and veratrum. Were I to select from this group a few as being pre-eminent, they would be aconite, asclepias, bryonia, phosphorus and veratrum.

I select these remedies in this disease with the same care I would exercise in any other disease and I am sure that my mortality is not 20 per cent. nor even 10 per cent. Yet one must remember that in the

compilation of statistics, if you treat ten cases of pneumonia in a year and lose but one you have a mortality of 10 per cent. It is said that figures will not lie, so one must be cautious when juggling with them. I do not believe it is necessary for me to enumerate the symptoms calling for these remedies, as you are all perfectly familiar with them. These remedies are used in both types of pneumonia with equal certainty and feeling of assurance.

True hygienic methods are also carefully carried out. The soda baths, the alcohol rub and fresh, cool air are all adjuncts not to be forgotten. There can no harm result from plenty of cold air and sunshine just so the body is kept warm. The cold air is for respiration, not refrigeration.

For local application I prefer the cotton or pneumonia jacket, save only when there is pleuritic pain, then I use libradol. The pneumonia jacket is light and cleanly, two necessary requisites.

I trust I have fulfilled the task assigned me. I have simply given you in a few words my own method of treating pneumonia. To me it has proven quite satisfactory. I do not tell you it will cure all cases because it will not, but for my colleagues and myself it has proven very much more satisfactory and successful than any other method yet devised.

DISCUSSION.

Dr. N. A. Graves, Chicago, Ill.: In the treatment of pneumonia the first essential is to get your case early and recognize the disease in its incipiency. Second, it is absolutely essential that the patient be put to bed and kept in bed. This should be impressed not only on the patient but the attendants, that the patient must be kept in bed until he is absolutely and entirely well. He may be propped up in bed, but it is absolutely essential in the treatment of any case of pneumonia, lobar or lobular or any other type, that the patient remain in bed until he is well.

The third thing is the necessity of protecting your patient from extremes of cold and heat, care in ventilation, plenty of air and sunshine, but absolutely avoid the uncovering of your patient or giving him a chance for a possible chill from cold air. Major Head, of Minneapolis, at Camp Wheeler attempted this treatment with about 1,400 of our boys. Practically 800 of these came down with influenza-pneumonia. These were placed in other hospitals, so they were exposed to the air and atmosphere as it came in, and there was no heat in the room. Of this number 13 per cent. died. Then they turned absolutely around and closed the windows to a large extent; they used heat in the rooms and kept them about 68 or 70, and with that treatment, without any particular medication, only 3 per cent. were lost.

Next in importance comes the diet. I have changed my mind in regard to diet from what I taught for a number of years. I still believe that individuals who have a temperature below 100 from any disease can be given a liquid diet or almost anything their palate desires. If the temperature is above 100 and below 103, he should be confined to a liquid diet. If it is above 103 it is better for that individual to have plenty of water to drink, possibly with the juice of fruits, but he is better off without anything to eat.

Now as regards the external applications: They are of value in some cases. There are many cases, those that we call pleural pneumonia, in which there is severe pain. Here we obtain excellent results from the use of external applications such as libradol, and this I use, particularly in cases of acute pleuro-pneumonia. Libradol applied with a flannel bandage around the chest from axilla to groin, and around this bandage I may draw an adhesive strip or two. This can be clipped and another adhesive bandage put on when you want to change the poultice. But in ordinary cases of pneumonia where pleuritic symptoms are not prominent libradol poultices have very little if any value. Here I use the old-fashioned turpentine and lard, or hot sweet oil. I use massage over the affected lung with hot sweet oil and lard, and over this flannel and over this a hot water bottle. These applications are not only of psychic value, but of particular value in acute lobar pneumonia.

As regards bathing the patient, bathe the extremities, the head and face, keep cool cloths on the forehead, all of which will make your patient comfortable. We must relieve the individual and not make him worse. It should be the aim of every doctor in treating his patient not to make a sick man sicker, but to sustain the vital forces and relieve in every way possible the symptomatology.

Then comes the care of the bowels and urine. As regards the bowels I am not so very particular about them. I like them to be moved, but if a patient has a high temperature if the bowels move freely in the beginning of the disease I let them alone until the second or third day. But the idea of elimination through the bowels and kidneys has not appealed to me. The bowels will take care of themselves, so do not be anxious. Elimination from the kidneys will be produced best by plenty of water to drink, and you may acidulate this water if you wish.

As to general medication, use no remedy unless you know what you are using it for. Unless you think you have a reason for the medication do not give any medicine at all. I would rather take my chances with a man who did not give anything unless he had a definite reason for giving it, and when you do that you get results from medication. Unless you have some definite indication for medication, whether it be aconite, bryonia, gelsemium or any other remedy, do not give it. Your patient is better off without it. But when you do have a definite reason then give the remedy that is particularly indicated. I will name five or six I use that are of particular importance. The first is veratrum. In a lobar pneumonia where you have a full bounding pulse, veratrum is the remedy. Then if I have a serous pain I give bryonia. It gives relief not only in pneumonia, but in any inflammatory condition of the serous membranes. Then, third, eupatorium, because it stimulates the action of the skin, which reduces the temperature. It has a kindly action on the heart and is not depressing. Then comes aconite, and there are a half dozen more I could name that might be indicated.

Remember, you are treating the individual, and you may have to use entirely different remedies in different cases. This is a general outline for the treatment of pneumonia, and while you lose some cases—the man does not live who has had any practice but loses cases of pneumonia occasionally—if you get your cases early and put them to bed and follow this general outline I have given you, your mortality will be extremely low.

Dr. R. L. Thomas, Cincinnati: I just want to mention one point in Dr. Pollock's talk that pleased me, and that was the correction of the

idea that he had not lost any cases. I was glad to hear him say he had lost five—that he was honest enough to say that he had. We have a splendid practice of medicine and we do not have to be dishonest to prove to the world that it is good. I heard an old practitioner say: "I have practiced medicine for forty years, and I am almost ashamed to say that I have never lost a case of pneumonia, and I use only two medicines, veratrum and bryonia." I am charitable enough to believe that that man had reached the age when his memory was failing and he had forgotten he had lost some.

I agree with everything Dr. Graves and Dr. Pollock have said. Do not say you can cure pneumonia with one remedy or with two. A true Eclectic selects his medicines and treats the condition, and conditions are not all alike.

Dr. R. E. Holmes, Harrisburg, Pa.: I can tell you one thing—when you work with Allopaths they are always looking for a crisis. Why do they expect a crisis? I will tell you. An Allopathic doctor attended my wife, and he gave her heart stimulants, and heart stimulants are bound to bring a crisis. They gave her adrenalin and digitalis and strychnia hypodermically every two hours, and I had to stop it. I gave her veratrum and bryonia and lobelia, and I think lobelia saved her. Why did they lose so many soldiers in the camps? It was the cold air and they did not have proper treatment. Never allow a patient to be in a temperature under 65.

Dr. S. O. Barwick, Elkhart, Ind.: Why do pneumonia patients die, regardless of school? There are two pathological conditions, and these are a heart lesion and a kidney lesion. That is why my patients die.

Dr. W. R. Schussler, Orland, Ill.: In our hospital we were obliged to discontinue all operations, except emergencies, and give all our efforts to combating this epidemic of influenzal pneumonia. You can not get away from influenza in these cases. It lasted until the patient recovered. So far as the treatment is concerned, that outlined can not be beaten; it is the best in the world. We have condemned the Allopaths as a whole for the mistakes they made, and they are continuing to make these mistakes, but there are a few who do not make these mistakes. I know one grand old man who had an enormous practice who had not lost a case, and he gave veratrum and no stimulants until the fever was broken.

Regarding the high temperature, I have had some cases in which the temperature ran from 105.6 to 106, and we used a cold pack and watched them very closely until the temperature was reduced. I believe we saved a number of lives by that measure.

Dr. Cole: One important remedy that I have not heard mentioned, and one that I have used in several cases, is lycopus. In cases of labored breathing with high temperature and irregular heart, give from five to fifteen drops of lycopus every one or two hours in connection with your other remedies, and that high temperature will subside, the pulse will become regular and in case of continued hemorrhage it will also be helped.

Dr. William P. Best: Dr. Schussler gave me a text. He states our condemnation of the Allopaths. They stand condemned on their own record; we do not have to condemn them. All we want is to get our record before the world; that is our business. It is up to us to tell people what we can do and it is our duty. If we have something better than they have, let us tell it. I know a number of old school men would gladly use our remedies and say they got them from us, but others

would not. But let them alone. We have no time to fool with them or fight with them. Let us talk about our own affairs. The evidence given here today of the treatment of pneumonia speaks for itself, and the record of the other fellows in the army of the United States speaks for itself.

Dr. F. E. Hufnail, Minneapolis: I was at Camp Grant, where there were a few Eclectics, but mostly Allopaths. The government allowed you to prescribe any remedy in that camp, but we could not get them. You do not have a chance to put 40,000 men to bed because they refuse to come in until they are down. They came down all at once and we had no place to put them. The mistake we made was the cold proposition. We could not get to them with remedies, but we did make a mistake in putting them in cold porches. We did not know what to do with them. We did the best we could. But the government does not put its hand on any remedy. You are free to use your remedy if you can get it to your patient. Those Allopaths were glad to do anything—they were wild to do something for those boys. I do agree that if we have something to put across the best way to do it is to get into every journal and put it across so the people will know what you have.

Dr. Goss, Georgia: In this epidemic I think some of the best diagnosticians made a mistake; I do not think some of these cases were pneumonia. The idea was if a patient died in three days it was pneumonia; if he lived a week or two it was not pneumonia. I realize the importance of three don'ts—don't stimulate the patient, do not depress him, and make him stay in bed until he is absolutely well. I attribute my success more to the things I did not do than to what I did do. To those I could not go to see, who came to me, I said: "Go home, take hot water and castor oil, and stay in bed; do not send for a doctor and you will get well," and they did, too.

Dr. Finley Ellingwood: Dr. Hufnail hit the nail on the head. The straightest road to publicity of our remedies is through the pen. You may say what you please, we may accuse others of crime because patients are dying, doped with morphia, kept in cold places until nothing can be done, but we will never accomplish results until we go at these things and send it to the medical journals. There are five or six independent medical journals which are glad to take these articles, and all the rest will take them if the censorship of the journal of the A. M. A. is not too severe. This is our duty as individuals.

Dr. W. J. Pollock, Chicago: I was glad to have this subject discussed. If there is anything in this it should be discussed. As to the local applications, there are certain times when local applications are a good thing, and the local application of hot salt, camphorated oil and libradol will relieve your patient very much. The use of eupatorium is good, but I agree with Dr. Graves that you should not use anything if it is not indicated. Go over your patient so you know what is indicated, and then use the few remedies that are indicated.

Dr. Hufnail spoke about the government allowing you to use any remedy you wanted to. That depended on the camp you were in. I had a friend who was a major in the Blackhawk Division, and he said they were out of remedies most of the time. I want you to understand that they did not have the remedies. They had thousands of cases to treat and only a certain amount of remedies, and of course they did not have enough.

As to influenza, all of us had hundreds and hundreds of cases that

we did not count in with our pneumonias. We are not compiling the statistics of influenza now.

A CASE OF EMPYEMA FOLLOWING THE INFLUENZA.

O. C. Welbourn, A.M., M.D., Los Angeles, Calif.

In common with the rest of the world Southern California had its "siege of the flu." To be sure it was somewhat modified by the climatic conditions, but it was quite severe enough to fully satisfy those who had it. Many of the cases were complicated with pneumonia and in these the mortality was high. Sometimes there was a sufficient involvement of the pleura to cause an effusion into the pleural cavity, and this accumulation of serum had a strong tendency to become pus. A patient having eventually arrived at this stage it might rightly be said that his condition was critical. The following case was of interest to me because the quantity of pus found was the largest in my experience.

Pete S., age 16, normal weight 180 pounds. Father is a Basque and mother a Piute. History given by attending physician who had seen him only the day before as influenza, double pneumonia and right empyema developing in the order named and covering a total of about three weeks. Present condition moribund. Temperature 103, respiration 46, pulse 140, irregular and weak. Entire right side of chest bulging and dull on percussion. Lower margin of the liver found on the pelvic brim. Apex heart beat displaced two and one-half inches to the left. Without delay and under light ether narcosis the usual rib resection operation was performed and the pleura punctured. At the end of an hour one gallon of creamy pus had been evacuated. How much remained is unknown, as it seemed wise to interrupt the evacuation until the displaced organs should have time to recuperate. The patient had a stormy convalescence but eventually fully recovered.

THE TREATMENT OF THE TUMORS OF THE WOMB AND ADNEXA.

P. F. Bullington, M.D., Chico, Calif.

Dunglison's Medical Dictionary by Stedman defines a tumor as a "circumscribed enlargement of a part due to the presence of a morbid growth." There is a long list of classified tumors, but we shall consider them as benign and malignant in this paper.

It is not within the province of this article to discuss the etiology of tumors lest we run into deep water, as we find there are many men of many minds when it comes to discussing the cause of tumors.

We shall divide the treatment of tumors of the womb and adnexa into (1) dietary; (2) medicinal; (3) electrical, and (4) surgical. In

order to discuss the dietary treatment of tumors it will be necessary to seemingly, at least, encroach upon the domain of preventive medicine.

It will be remembered that we are treating morbid tissue, and in order to improve the morbid condition we must give the general system the organic salts which it demands in the form of foods or medicines. In order to prove that the denatured foods, such as we buy today in the open market, are robbed of their inorganic salts, we will have to give some specific examples. Whole wheat, for instance, contains about 5 per cent. of these mineral salts, while refined wheat flour has less than 1 per cent. Rice contains about 6 per cent., while polished rice less than 1 per cent. Brown sugar contains about 4 per cent., while the refined sugar has less than 1 per cent., all of which tends to prove that such foods rob the vitality of the cells of the human body and tumors, both benign and malignant, may be the result. Therefore give a food rich in the mineral salts and the tumor patient is thereby benefited. A diet of fruits and vegetables is to be preferred, as they are rich in the necessary mineral salts, therefore to be preferred to a diet of denatured cereals.

Dr. C. E. Lakeman, of the American Society for the Control of Cancer, in his 1915 report says: "We now have 80,000 new cases of cancer each year," which conclusively proves that cancer is increasing rapidly in this country. In the report of the United States Census Director for the same year he says: "It will be seen that cancer of the stomach and liver is preponderant, as approximately 40 per cent. of all deaths from this disease were returned as cancer of these organs." This being true, these facts tend to prove that Dr. Packard is correct when he says: "Adulterated, denatured, refined and demineralized commercial foodstuffs are directly responsible for the prevalence of this disease." If this be true of malignant tumors why may not the same be said concerning benign tumors?

Along the same course of reasoning, if tumors form in the tissues from a lack of mineral salts as supplied by normal foods, is it not good reasoning to say that a tumor in the forming stage can be checked in its growth by giving the patient a diet rich in the required mineral salts?

Medical Treatment.—A study of the tissue remedies will give the clinician valuable information regarding the specific treatment of tumors.

As most tumors have a glandular nucleus, we give phytolacca as one of our foremost remedies in treating these growths, as it is rich in natural mineral phosphates and in a form to be readily assimilated. Phytolacca has long been recognized by the Eclectic school of medicine as a leading remedy in the treatment of glandular enlargements. I use the specific medicine in one-drop doses every three hours. Specific fraxinus should be prescribed in all tumor cases, such as are now under discussion, in twenty-drop doses at least four times a day.

Sp. solanum has known virtues for the treatment of internal tumors, therefore should not be overlooked.

Sp. rumex, being rich in iron, should be tried in all cases of benign tumors.

The iodides of potassium and sodium should be given in all cases of luetic or suspected luetic origin.

Electrical Treatment.—We do not claim any specific action for electricity in the treatment of these tumors above that of drugs, therefore we use it as another form of treatment to assist in the discouragement of the growth as well as its supposed destructive properties, and use it in conjunction with the dietary and drug treatment.

In benign tumors apply a saturated solution of the iodide of potassium to the skin over the growth with the negative pole of the galvanic battery, the positive pole to the back, using a large pad wet with salt water. Give a treatment of twenty minutes every day, using from twenty to thirty milliamperes. By this cataphoric medication we can get more iodine into the tissues and get it directly into the tumor.

In case of malignant tumors, use the X-ray for twenty minutes every other day, being careful not to set up too much of an X-ray dermatitis.

Some make great claims for the X-ray in the treatment of malignant growths, but as for my own experience, I can not claim much for the treatment.

While it is true that the X-ray breaks down the cancer cells before the healthy tissue cells are affected the ultimate end accomplished does not speak very strongly in favor of the treatment.

Surgical Treatment.—After having faithfully tried the above treatment if you fail to relieve your patient surgery will be your *dernier ressort.* I do no abdominal surgery myself, as I have spent my time in medical and electrical therapy; therefore, when I have such a case I take it to, or call in, a surgeon of good standing to do the operation.

I feel the surgical field has been overworked and that there are too many two-by-four surgeons that can see no other reason for using the knife than the sight of the dollar sign.

COUGH AND ITS SIGNIFICANCE.

J. Fraser Barbrick, M.D., Boston, Mass.

Cough is the term we apply to an expiratory act which must have for its characteristic formation two elements, first, an explosive element due to a sudden relaxation of a preceding spasmodic glottic closure; and, second, a vocal element due to the escape of the released air through the rima glottidis. The definition of cough as an explosive, expiratory effort to expel mucus or other matter from the bronchial tubes or larynx is not strictly nor wholly scientific, as there are a number of forms of cough in which nothing is expelled and the cause of the cough is remote

from the structures in which the act must be produced. For this reason I have endeavored to formulate a definition both scientific and comprehensive and think the foregoing meets these requirements.

Causes.—Though cough may arise from a multitude of causes, in the majority of instances it points to disease, acute or chronic, in the chest, such as bronchitis, asthma, phthisis, the pneumonias, pleurisy, etc., or to affections of the upper respiratory tract, as laryngitis, pharyngitis, rhinitis, etc. While commonly purposeful, and intended to remove irritating substances in the shape of foreign bodies or the irritating secretions accompanying diseases of the air passages, from the bronchi or throat, it may be purely neurotic, as the obtrusive cough of hysteria and barking cough of puberty; entirely reflex, as the so-called ear cough produced as the result of irritation of Arnold's branch of the pneumogastric nerve by disease, impacted cerumen, or the manipulation of aural specula in the external auditory canal, the dentition and worm coughs of children, and the cough due to pregnancy, all of which disappear immediately on removal of the cause; or it may be wholly mechanical, as the cough due to a relaxed and trailing uvula which starts the instant the patient lies down and thus prevents the correct mechanical conditions for its production.

Other common causes of cough are nasal affections, especially hypertrophied turbinates and the hypersensitive nasal mucosa, such as is usually found in hay fever and frequently associated with asthma; the bedtime and night cough of children due to adenoids and tonsils; the stomach cough of the alcoholic due in reality to the accompanying pharyngitis; the occupational cough of the clergyman and public speaker, and the habit cough of the smoker, both due to the associated laryngitis; and the unknown infection which gives the characteristic paroxysmal cough of pertussis.

Less common causes of coughs, but nevertheless causes which should not be forgotten or overlooked, are pelvic diseases of women, diseases of abdominal organs in relation with the diaphragm, and the pressure coughs due to thyroid enlargements, esophageal and mediastinal growths, aneurysm affecting the arch of the aorta or carotids, and pericardial effusions.

It might be well to remember that in pulmonary troubles it is not the irritation of the lung substance that causes the cough, but irritation and inflammation of either the bronchial mucosa or pleural membranes; also to recall that in all the exanthemata and infectious fevers, cough may be an accompaniment due to irritation of the mucosa of some part of the respiratory tract both by direct infection and indirect action.

Types and Varieties: Cough is most commonly spoken of as dry or unproductive and moist or productive; also as hard and loose. Varieties are the paroxysmal, laryngeal, reflex, neurotic, hysterical, hoarse, brassy, pressure, noiseless and toneless.

The dry, hard, hacking or unproductive cough is usually associated

with the first stages of colds and bronchial inflammations, incipient phthisis, pneumonia before exudation has occurred, and in the beginning of whooping cough, asthma and pleurisy, in all of which diseases it may be more or less painful and is often paroxysmal. Practically all of the nervous, reflex, and pressure coughs are dry, at least in their early stages.

Moist, productive or loose coughs are seen in the later stages of bronchitis, pneumonia, asthma, pleurisy, whooping cough, phthisis, emphysema, etc., and if attended by a profuse expectoration after a paroxysmal spell of coughing, are associated with the breaking down of lung tissue, the formation of cavities, rupture of abscesses into the bronchi, bronchiectasis and pulmonary gangrene. Dry coughs are of no particular value to the patient, being merely a sign of reflex irritation; but a loose cough is of the greatest possible use, as it is an effort of nature to get rid of irritating secretions and poisonous mattter. Therefore such coughs should not be stopped, for if stopped in pneumonia resolution is hindered, and in purulent bronchitis, bronchiectasis, pulmonary tuberculosis, gangrene and abscess, septic absorption of the retained secretions and death might result.

The typical paroxysmal cough is whooping cough, but it is also associated with spasmodic croup, is frequently due to reflex irritations, and may be caused by laryngeal tumors or the inhalations of irritating vapors or foreign bodies.

Smothered or suppressed cough is due to an effort on the part of the patient to prevent the act and is usually indicative of pain. It is generally associated with acute bronchitis, pneumonia and pleurisy.

An obstinate cough accompanying bronchitis, which resists all ordinary treatment, should lead the physician to suspect that he has one of three ailments to deal with, namely, an overlooked tuberculosis, an unsuspected Bright's disease or cardiac failure.

The nervous cough generally has the character of single short, dry explosions repeated at fairly regular intervals; and the reflex cough is much the same, only more paroxysmal.

The hysterical cough is usually loud and barking and gives one the impression of being produced with the view of attracting attention.

The laryngeal cough, especially in acute conditions, may be quite severe, is usually associated with hoarseness or huskiness of the voice, may be of a harsh, brassy, barking character or take the hoarse, ringing, stridulous, croupy form.

The pressure cough, caused by encroachment upon the lumen of the main bronchi or trachea by mediastinal tumor or aneurysm, has a peculiar, resonant, metallic or brazen character, which has aptly been compared to the cry of a gander, and when once heard is almost sufficient to clinch the diagnosis without further examination.

The series of hoarse, hollow coughs followed by the peculiar crowing sound, which comes seemingly just in time to save the child from asphyxiation and is due to the forced indraft of air through the glottic

chink which closed spasmodically with the attempt at deep inspiration, is so diagnostic of croup that even the laity recognize it; and every one is so familiar with the typical inspiratory whoop of pertussis that no further reference to it is necessary here.

Quite often children suffering from adenoids and tonsils develop a cough on going to sleep which startles and awakens them, and soon after ceases, to recur the moment they fall asleep again. This is a mechanical cough due to the tonsils touching one another or tickling the uvulva in the relaxation of sleep. As soon as the child wakes, muscular contraction separates the approximating surfaces and the cough soon ceases.

The noiseless cough occurs in paralysis of the glottis, and the toneless cough in the terminal stages of pulmonary disease.

Finally, the cessation of cough in purulent bronchial affections, advanced pulmonary phthisis and severe pneumonic processes is a bad sign and indicates exhaustion, collapse, profound toxemia or approaching death.

PNEUMONIA TREATMENT.

Geo. W. Aylesworth, Collingwood, Ontario.

I began my study of this subject as a "kid" at the age of six, when I stood with my hands behind my back some two or three feet from a "lusty" male patient of my f ather's, who was getting ready to bleed him in the good old-fashioned way. It will be recognized as a sthenic case when it is known that the first gush of blood went pretty much all over my face and pinafore. This occurred about sixty-five years ago and is the only time I have seen venesection used in pneumonia though in active practice for fifty years. Those were troublesome times. Homeopathy and Eclecticism were disturbing the placidity of the profession which had existed from time immemorial—authority being at high premium, and originality, if not prohibited altogether, was at a heavy discount.

At college I was taught to use both aconite and veratrum viride in full doses, they being regarded as almost specifics in pneumonia, and in some cases this faith seemed well founded. In other cases they proved even worse than complete failures and thus fell into disfavor with old or regular schoolmen, and as one of them I discontinued their use.

But investigations of Homeopathic and Eclectic therapeutics were practically forced upon me, resulting in the evolution of a working hypothesis so satisfactory in the treatment of pneumonia that I have ceased to seek an improvement.

The basis of this hypothesis is the belief that aconite is a heart stimulant and veratrum viride a heart depressant; also that pneumonia is asthenic or sthenic. The component parts of this hypothesis are almost universally admitted if the claim that aconite is a heart stimulant be accepted.

Authorities are easily found to say that it is both a stimulant and a depressant. The U. S. Disp. faintly supports this view by saying: "In moderate doses aconite is said to excite the circulation, but this effect is doubtful and certainly not constant." Hase in one sentence declares: "Aconite is both a stimulant and sedative"—in different doses, of course. Ringer begins his discussion of the drug by saying: "Perhaps no drug is more valuable than aconite, and I predict that ere long it will be more extensively employed." But, after devoting eleven pages to its discussion leaves the question as to whether it is a stimulant or depressant "up in the air."

Accepting the aforementioned basis from the standpoint of the writer in his view settles the much debated question of the usefulness of aconite and veratrum viride in pneumonia.

To get curative results aconite must be used in the minute dose lest the paralysis of over-stimulation be induced, and veratrum viride must be used in the large dose lest the depression induced be too feeble to give results.

To me it is beyond all question that aconite in the minute dose (as Homeopathics use it) is as much a specific in asthenic pneumonia as quinine in malaria. Similarly veratrum viride in the physiological dose is curative in sthenic pneumonia. Further, aconite in any dose does harm in sthenic cases and veratrum viride in any dose does harm in asthenic cases.

So that if I am sure of my case being a sthenic one and veratrum viride seems to fail, I do not discontinue the drug, but increase the dose.

If I am sure of my case being an asthenic one and aconite seems to fail I do not discontinue the drug, but reduce the dose.

Thus is shown the weak point in Homeopathy. Hughes over thirty years ago wrote: "If Homeopathy had done nothing for therapeutics but reveal the virtues of aconite it might even die content," and between the same covers he devotes ten pages to aconite where he does one page to veratrum viride. These conditions still obtain and indicate that the Homeopathic law of similars, if it be confined to stimulative drugs used in asthenic troubles, is true; otherwise not.

The Eclectic school values veratrum viride and aconite as equally useful because they vary the doses as indicated above and is the more efficient on that account.

Tartar Emetic.—For many years I have used tartar emetic as a remedy in broncho pneumonia or, as formerly known, capillary bronchitis, in children with what I regarded as specific results.

After losing a couple of cases of pneumonia complicating the flu early in the tremendous epidemic of 1918-19 I was impressed with the resemblance of this pneumonia to the capillary bronchitis. I thought of the use of tartar emetic and began its use and was soon convinced that it was specific in the Eclectic sense. As time wore on I used it more until

during the latter half of the epidemic I gave it to all the flu cases coming under my care, without further loss of life and entire absence of pneumonia unless it had been established before I was called.

I do not claim the use of this drug for this disease as new or original with me, having watched my preceptor deal it out at the bedside over fifty years ago, but the method of administration has changed from doses large enough to produce nausea to doses too small to produce noticeable effects unless it be upon the lungs.

My prescription, in addition to the indicated remedy or remedies gelsemium, bryonia, aconite, or what not): I added to the half-tumbler of water or four-ounce mixture from one to five gtts. of tartar emetic, giving a teaspoonful every two to four hours. In my hands it either aborts the disease when begun early or puts the patient on the high road to recovery inside of forty-eight hours if begun after the disease is established.

Before allowing myself to be convinced I made many experiments which it would seem unnecessary to detail.

I have read the best journals I could select of the old school, Homeopathic and Eclectic schools for thirty years and Clinical Medicine since it began its meteoric course as the Alkaloidal Clinic, I think, and I have yet to see anything upon the point herein elaborated except what I have written myself.

PLEUROPNEUMONIA.

C. S. Sackett, M.D., Charlotte, Mich.

The treatment of pleuropneumonia, like all other diseases, is the treatment of the patient and not the disease. However, a correct diagnosis of this disease, or rather this complication of diseases, is very necessary in order to carry out an intelligent line of treatment. Probably no other disease requires a more careful and thorough daily examination by the physician. I know of no disease in which the daily record kept by an intelligent and watchful nurse is more helpful to the physician. Pleurisy, like pneumonia, may be a primary disease, but pleuropneumonia is generally, if not always, a complication of lobar pneumonia. It is not my purpose to give the diagnosis, but having made the diagnosis, I will proceed to give my mode of treatment.

In the majority of cases my first diagnosis will be a simple lobar pneumonia. In a few instances I will have seen the patient during the initial chill, fever high, restless, cold chills run up the back when moving, face flushed, breathing fast, but not yet coughing. My most common prescription will be gelsemium gtts. 5 to 30, Fowler's Sol. gtts. 5 to 15, water one-half glass. Give teaspoonful every one or two hours. Formin grs. 10 dissolved in a glassful of water, and repeat in two hours. Children one-half this dose. I do not give formin to children under eight or

ten. As a topical application, I usually prescribe a camphorated oil with turpentine. If I dispense the medicament I use a preparation of camphor, lobelia, menthol, oil eucalyptus, oil of cajeput, and cotton seed oil, which I procure of the Chapman Mfg. Co., Chicago. In this way I think I have aborted what would have resulted in some form of pneumonia in a few hours. Many times in the sthenic cases I apply a cold pack with salt water, leaving it in situ six or eight hours.

Having diagnosed acute pleuropneumonia, I will prescribe as follows: Belladonna gtts. 5 to 10, echafolta drams 2 to 4, water one-half glass. M. Sig. Give a teaspoonful every two hours. The belladonna will be replaced by gelsemium if indicated. If there is evidence of sharp pains and cough, I add bryonia gtts. 5 to 10 to the above. After one or two days I frequently give asclepias and bryonia in one mixture and alternate it with lobelia in another solution. For a local application I prefer libradol. The compound emetic powder gives good results, but it is not so easily applied and has a dirty and greasy appearance. Some use mustard plasters, but they are mussy and are liable to blister, and I do not like to blister my patient.

Many cases of acute influenza, bronchopneumonia, pleuropneumonia, etc., will be found to be suffering from autotoxemia from faulty metabolism. This is often induced by bad habits of eating, such as overeating, irregular eating, badly balanced rations, etc. To overcome this a thorough but careful course of elimination must be instituted. A few cases may need a brisk cathartic, but I believe that most patients do better with the milder measures. A few small doses of calomel followed by castor oil or small doses of a saline are sufficient. If the toxemia does not clear up easily, I would give iodine in small doses and increase the dose each day until an average dose is reached. Some patients do not seem to be able to take iodine, so of course it should be discontinued. It is surprising how many of these cases clear up on iodine even when there does not seem to be any reason to believe them to be luetic. Symptomatic treatment is good, but we must not forget the pathology.

Having satisfied myself that my diagnosis is correct, and watching carefully at each call for any change in the pathology, with or without marked symptoms, my treatment being outlined as above, I follow this as closely as the conditions will warrant.

I have a great deal of confidence in the use of lobelia, bryonia and asclepias in this disease. As an antizymotic to oppose the action of the various bacilli which infest these organs at this time I give echinacea freely. I some times supplement this with iodine, but generally replace it with iodine. As a prophylactic I give iodine a great deal. For this I use iodized calcium. In pleurisy or pleuropneumonia I use a solution of iodine.

The convalescence of these patients must be watched, as relapses or other complications are liable to occur. The urine of these patients

should be examined often throughout the whole course of this disease. An acute nephritis is not at all uncommon and must not be overlooked. Empyema is a common sequel and must be guarded against from the first. I believe that the careful study of the symptomatology and pathology and the thorough application of the principles of specific medication will reduce the mortality to a very low per cent. I have little respect for the skill of a physician who believes that pneumonia is a self-limited disease and that a certain per cent. will live and the rest die, regardless of the treatment. I have been successful, fortunate, some will say, in the treatment of pneumonia.

One can not give in one brief paper what has taken years to learn, but any, no, most, physicians can be successful if they will make the proper effort.

There are a score of little details in the treatment of diseases that make for the success of the physician. Among these, the size and frequency of the dose, in each individual case is very important. Little details in the nursing and feeding are important. The idiosyncrasies of individuals are so different.

THE CULTIVATION OF DRUG PLANTS IN THE UNITED STATES.

Chas. G. Merrell, B.S., Cincinnati, O.

The comments made by Professor John Uri Lloyd on the paper on "The Influence of the War on the Cultivation of Medicinal Plants,"* which I read before the National Association at its last annual meeting, were most flattering and extremely interesting, and brought out very clearly the change in the conditions which surround the practice of medicine. Professor Lloyd pointed out that when the Eclectic school of medicine was founded, every practitioner was a practical botanist, that he could recognize at sight the medicinal plants which grew all about him, and could select and gather for himself such as he needed. Now, however, these natural drug gardens have largely disappeared, and, even if the physician is a good botanist, he can rarely find opportunities to exercise his skill, but must depend for his botanical drugs upon the professional collector.

When my grandfather, Dr. Wm. S. Merrell, founded the Wm. S. Merrell Co., ninety-one years ago, in Cincinnati, that town was the center of the crude drug industry of the United States. More indigenous drugs were brought into commerce there than anywhere else in the country, but as the railroad communication improved, and the use of the Ohio River as a medium of transit for freight and passengers declined, the seat of the indigenous drug industry was transferred to the Blue Ridge Mountains, where it still gives occupation for hundreds of

*See Quarterly for September, 1919.

collectors and dealers. I have before me a price list issued by one of the dealers in the Blue Ridge Mountains, naming the prices offered in cash for 130 different roots, herbs, barks and leaves. This price list was good until July 15, 1918. There are scores of such dealers who deal direct with the collector and who turn over their products to the wholesaler. Under the influence of the shortage in labor caused by the "men folks" joining the army, the prices offered on these indigenous drugs have been advanced steadily, but still are not sufficient to tempt workers from the outside world to seek employment in this industry. Indeed, a considerable degree of skill and a very broad knowledge of the indigenous plants is required of these humble workers.

There is one old lady in the mountains of Carolina whose knowledge of "yarbs" is almost uncanny. She has been employed by one of the largest dealers in botanical drugs, Mr. S. Barksdale Penick, to collect type specimens of the indigenous drugs in flower. She has collected thousands of specimens and hundreds of varieties and mounted them for use in herbariums. Her work has always been checked up by an expert pharmacologist, and though she is hardly able to read and write, and would be classified as an illiterate, she has never yet made an error naming any specimen she has collected. The total consumption of any one of these drugs is usually small, and any attempt to materially augment the supply would probably lead to a plethora and a reduction in price.

But in the cultivation of the few of the more commonly used drugs there do seem to be possibilities of commercial success. Even here there is always danger of over-production with consequent loss to the grower.

Under the stimulus of the high prices paid for belladonna during the war, a number of people undertook its growth. One grower happened to make a very large crop in 1917, and since the market was almost bare of the drug, he received some sixty thousand dollars for a crop from a comparatively small area. Reports of this kind, however, have stimulated others to undertake the cultivation of belladonna, with the result of an over-production and a decline in price. During the year 1918 there were at least sixty growers of belladonna, who reported an acreage of over 273 acres and who produced about 91,050 pounds of herb, 59,311 pounds of leaves, 15,713 pounds of stems, and 22,277 pounds of roots.

Of these growers thirteen were located in Michigan, seven in Indiana, four in New Jersey, six in Pennsylvania and twenty-four in California. Each grower had on an average 4.5 acres under cultivation. These figures are taken from a paper presented at the New York meeting of the American Pharmaceutical Association by Dr. W. W. Stockberger, chief of the office of drug, poisonous and oil plant investigations of the United States Department of Agriculture, and much of the data given below is drawn from the same source.

Whenever any new phase of agriculture is taken up, we may confidently reckon upon meeting with some insect or parasite whose depredations will seriously retard the development of the industry. The potato borer has become such a menace to the belladonna plantations in the southern part of California, that it seems probable that the growth of the drug will be abandoned there.

Cannabis has been grown by eighteen growers in Illinois, New Jersey, South Carolina and Virginia, the total crop amounting to 59,650 pounds, there having been 8,225 acres planted. Here the question of quantity has an important bearing on the quantity of the yield, as the careful grower will reject more than 50 per cent. of the drug.

Digitalis.—Several tons of digitalis leaves and a quantity of the seed were collected from wild plants in the North Coast range of the Pacific, and the competition of this wild drug has prevented the establishment of digitalis culture on a large scale commercially.

Calendula.—The importation of this drug from Japan in 1916 caused a sharp decline in price and mitigated against the establishment of its growth on a commercial scale. Nevertheless the United States Department of Agriculture has reports showing that during 1918 two acres were grown in New York, six in Massachusetts and a number of small plots in Los Angeles County, California.

Sage.—Twelve growers have met with moderate success in producing this drug on a commercial scale in Wisconsin, Missouri, Ohio, Massachusetts and South Carolina. About ten acres were devoted to sage, the yield varying from 300 pounds to 1,250 pounds to the acre.

Hyoscyamus.—While a number of growers have undertaken to produce hyoscyamus, it has not been a success from a commercial point of view except in the hands of one or two specialists. Moreover, the special incentive of extraordinarily high prices is lacking since the prices have declined materially. One of the most successful growers of this plant has been the A. M. Todd Co., of Kalamazoo, Michigan, who first became producers of the volatile oils of peppermint, spearmint, wormwood and tansy. These plants were grown on a very large scale by them and the oils were distilled by the grower, who became an important factor in these essential oils. The assistant superintendent of the plant has had many years' experience in the best English practice in growing these essential oils, as well as other drugs which are grown on a commercial scale in England.

The Todd Company have made extensive experiments covering the propagation and growth of stramonium and digitalis, but have not undertaken to produce these on a large scale, as they did not care to undertake competition with the indigenous wild plants. They inform me that they are still experimenting with the aconitum napellus and hope eventually to be able to offer this bulb to the trade. They have grown some burdock, but this seems to have a very slow sale.

In growing both the belladonna and hyoscyamus the first difficulty experienced is that of obtaining good seed which would germinate. They eventually were forced to grow the seed themselves, and in this connection were given much valuable assistance by Dr. Stockberger and his staff. The marked variance in the alkaloidal contents of the individual plants of the imported drug had led to an effort to increase the yield by breeding, and it seems probable that much can be effected in this way.

While the potato borer has not been so hurtful to the belladonna plant in Michigan as it has in Southern California, some trouble has been experienced with it and also with the "jumping flea beetle." The Colorado potato beetle has also developed a great fondness for the belladonna and hyoscyamus.

We have passed the romantic phase of the cultivation of medicinal plants and are now confronted with the need for a careful, systematic study. As already pointed out, the United States Department of Agriculture has carried on, and is carrying on, a number of experiments on a broad scale the results of which will be of great value to the commercial grower. The School of Pharmacy of the University of Wisconsin is also studying the growth of drug plants from a commercial viewpoint, and to that end has relatively large plots of several of the more important drugs under cultivation. In both the United States and the Wisconsin studies much attention is being paid to the question of species and varieties, for many of the statements regarding the botanical origin of the drugs are erroneous and have been handed down from generation to generation without accurate study and investigation.

The United States is not alone in its realization of the need for promoting the growth of medicinal plants, for we find in the Portuguese, the French, Spanish, and in the German journals, frequent references to the need for the development of the drug plant industry. Brazil has a very abundant and varied flora, and quite recently a comprehensive article on the cultivation of medicinal plants in Brazil appeared. The Semana Medicale of Buenos Aires last year also published an article on the cultivation of medicinal plants in the Argentine Republic. In most of these articles stress is laid on the necessity of becoming independent of outside aid in the matter of botanical drugs. Our own experience during the war corroborates the wisdom of this view, and it is to be hoped that the efforts being put forth to establish a drug plant industry in the United States will be successful, so that we may be, as far as possible, independent of the balance of the world.

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WILLIAM NELSON MUNDY, M.D. . . . . EDITOR.
FOREST, HARDIN COUNTY, OHIO.

J. K. SCUDDER, M.D. . . . . BUSINESS MANAGER.
CINCINNATI, OHIO.

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"BLESSED BE SUCH INSANE."

The other day, in looking over the Association Quarterly, I came across an extract which is not only worth reading, but worth spending some time over, it is worth studying. The man was supposedly insane, but we can not help but wish that all of us be afflicted with such great, beautiful, insane (?) thoughts.

Read Item 1, and you must agree with me that many fathers and mothers would do well to memorize those words. Read Item 2. What can be more sublime, more grand, more tender, than this request to children? If you pay attention to Items 3, 4, 5 and 6 you will no doubt exclaim: "If these are the sentiments of an insane man, me for such an insanity, and God rest his poor suffering soul. Whatever he might have done, whatever he did, wherever he is, he had a golden heart, a heart full of love for his fellow being, a heart full of sunshine and kindness."

Now, read this with attention:

A poor lawyer, who was supposed to be hopelessly insane and who was an inmate of a hospital, died, leaving nothing but the following will. It will outlive many a learned treatise destitute of imagination or sentiment. Incidentally it illustrates the close kinship which many times is found between talent and mental aberration, and may even, perhaps, help to correct certain current misconceptions with reference to the nature of insanity in general. The will:

"I, Charles Lounsberry, being of sound mind and memory, do hereby make and publish this, my last will and testament, in order, as justly as may be, to distribute my interest in the world among succeeding men. That part of my interest which I know in law, and recognized in the sheep-bound volumes as my property, being inconsiderable and of no

account, I make no disposition of in this will. My right to live, being but life estate, is not at my disposal, but these things excepted, all else in the world I now proceed to devise and bequeath.

1. I give to good fathers and mothers, in trust for their children, all good words of praise and encouragement, and all quaint pet names and endearments, and I charge said parents to use them justly, but generously, as the needs of the children shall require.

2. I leave to children exclusively, but only for the terms of their childhood, all the flowers of the field and the blossoms of the woods, with the right to play among them freely according to the customs of children, warning them at the same time against the thistles and thorns. And I devise to children the banks of the brooks, and the golden sands beneath the waters thereof, and the odors of the willows that dip therein, and the white clouds that float high over the giant trees. And I leave to children the long, long days to be merry in in a thousand ways, and the night and the moon and the train of the milky way to wonder at, but subject, nevertheless, to the rights hereinafter given to lovers.

3. I devise to boys jointly all the useful idle fields and commons where ball may be played, all pleasant waters where one may swim, all snow-clad hills where one may coast, and all the streams and ponds where one may fish, or where, when grim winter comes, one may skate, to have and to hold the same for the period of their boyhood. And all the meadows, with the clover blossoms and butterflies thereof; the woods, with their appurtenances, the squirrels and birds and echoes and strange noises, and all the distant places which may be visited, together with the adventures there found. And I give to said boys each his own place at the fireside at night, with all the pictures that may be seen in the burning wood, to enjoy without let or hindrance and without any incumbrance whatsoever.

4. To all lovers I devise their imaginary world, with whatever they may need, as the stars of the sky, the red roses by the wall, the bloom of the hawthorne, the sweet strains of music, and aught else they may desire to figure to each other the lastingness and beauty of their love.

5. To young men, jointly, I devise and give all boisterous, inspiring sports of rivalry, and I give to them the disdain of weakness and undaunted confidence in their own strength. Though they are rude, I leave to them the power to make lasting friendships, and of possessing companions, and to them exclusively I give all merry songs and brave choruses to sing with lusty voices.

6. And to those who are no longer children, or youths, or lovers [that means you and me, doctor], I leave memory, and I bequeath to them the volumes of the poems of Burns, and Shakespeare, and of other poets, if there be others, to the end that they may live the old days over again, freely and fully, without title or diminution.

7. To our loved ones with snowy crowns, I bequeath the happiness

of old age, the love and gratitude of their children, until they fall asleep."

Was this man insane? He died poor, penniless. Was he really insane, was he really poor? A man with such ideas, such kind thoughts, who dwelt in such a kind, beautiful mental world, a man like this, no matter if he was kept in an insane asylum, he was rich, he was wealthy in things that many of us can not boast of. That man suffered, it is true; he could not see the sufferings of others (as he certainly must have seen), he could not see the injustice of many things, nor the small, picayune souls and natures of many men, without suffering. And yet, through all of it, his soul remained pure white. And if insane he was, such insane, be they all blessed.

WHY NOT A DOCTORS' UNION?

Chicago, Ill., July 20, 1919.

To the Editor: Free consultations, advice and prescriptions in the columns of the daily press. Free Wassermanns, free salvarsans, free medical treatment of all kinds for the affluent. Pitiful salaries for public medical officers; free medical services to the government, and as yet no free food, free raiment or free rent fo rthe doctor. The doctor pays the same taxes as the next fellow (note the "excess profits tax" of last year) and his funeral is just as expensive as is a layman's. Similar conditions in labor circles would cause a few bloody riots. "Scab" labor is not popular.

But labor soon cures such ills. Why? Because labor is organized and its votes command respect.

It is true that small groups of doctors occasionally do organize and get behind one or another candidate in election. If these men were asked why, the majority of them could not give an intelligent answer. The interested few would not answer, or at least truthfully. Did any one ever hear of the profession organizing itself politically and getting behind a big principle in the interest of the profession as a whole? Individual doctors get behind candidates for public office, it is true, but rarely on principle. Most of these medical men bob up in politically filled offices later on.

A certain medical gentleman in high political office once said, "The doctors can go to hell." This gentleman knew the spirit of the public and he also knew the medical profession.

If the doctors of this country ever intend to strike for their rights, now is the time. The profession has just demonstrated that, in the last analysis, it is the most useful of all professions. Governments are so crude and reversionary that they can not sustain themselves without war, and—no doctors, no army. The government now might listen to us if we hurried.

All of which is purely gratuitous and super-erogatory.

Why seek for an *esprit du corps* in the doctor, who, being the only known organism that has not the instinct of self-preservation, consequently is the humblest creature of which biology takes cognizance.

Not only does the doctor lack the instinct of self-preservation, but he evinces great activity in legislating against himself. N. B. If a practitioner of repute in his own state wishes to practice in another in which there is no reciprocity, he is confronted with an examination—often at the hands of men who could not even formulate their own questions, much less answer them, without the aid of a medical library. All the same, the United States Government drew no lines of discrimination against any state or method of licensing when physicians were needed for the army.

The present trend toward social upheaval suggests that the doctors would better "get in out of the wet." A doctor's union might enable us to pass as "wage earners." This would be a big concession on the part of the public, which is slow to admit that a doctor ever earns anything, even gratitude. What is still more pertinent, it might prevent the doctor from being classified as bourgeoise. Events might so shape themselves that such classification would be dangerous to the profession.

But "What's the use?" G. Frank Lydston.

ORGANIZATION.

The above letter by G. Frank Lydston was published in the *Illinois Medical Journal* August, 1919. To some it may seem a little harsh, yet it contains more truth than poetry. The high cost of living has not only struck the doctor, but the high cost of drugs has hit the country doctor and the cost is constantly mounting higher and higher.

This, however, we feel is only temporary, but the steady increase of paternalistic legislation; of medical legislation curtailing the income of the physician and increasing his burdens; of the steady increase of specialties, frequently robbing the physician of his just dues, all call for a readjustment.

The steady increase of health and pseudo philanthropic legislation increases the burdens of the profession and decreases its emoluments.

The odium of the Harrison anti-narcotic law and the prohibition enforcement law is laid at his door. Not only do we have "free Wassermanns, free salvarsan, free medical treatment," as Dr. Lydston states, but we have free laboratory service and, for fear the physician might charge too much, the price of diptheria antoxin is made alike to physician and patient.

With the fee-splitting laws and health and medical legislation, workmen's compensation laws and industrial insurance and the constant lengthening of the curriculum for the physician, we can see but little in store for the physician. It is time the profession should strike for higher compensation, shortening of hours. "All work and no play makes Jack a dull boy"; and the medical profession gets no hours for relaxation.

Organization is needed that we too should be protected. The union business is being overdone, but there are others that need protection beside "wage earners" and employers. M.

THERAPEUTICS.

In the journal of the American Medical Association of August 16th appears an article entitled "Suggestions for an Ideal Course in Therapeutics," by W. A. Bastedo, M.D., and an editorial comment on the same entitled "The Medical Student and the Department of Therapeutics." Both of these will bear careful reading and thought. In fact, there are several articles in the same issue that will bear careful scrutiny and a comparison with the articles named.

In the editorial the writer states that "pharmacology and physiology have demonstrated the absurdity of many of the products of ancient pharmacy, and have substituted reason and experiment for empiricism."

We doubt the substitution of reason, for we can see but little reason in the measures suggested in the several articles on the treatment of pnumonia and influenza recently published in the same journal, ranging all the way from "a sunlit room, plenty of fresh air and a light diet with a liberal amount of liquids" to vaccines, cocoa, sodium salicylate, urea hydrochlorid. In fact, there are as many plans of treatments as there were speakers. The same criticism applies to the discussion on pneumonia appearing in late issues of the same journal.

We are not so sure that experiment or reason have replaced empiricism. We realize full well that the laboratory worker has attempted to reason or persuade the clinician that experience, no matter how often repeated, has no weight. If reason has supplanted empiricism, then why can not a clinician be guided by his own experience rather than by the experiments of the laboratory worker, who only deals with rabbits, guinea pigs, mice, monkeys and test tubes? It seems that the physician dealing daily with the sick man is just as capable of reasoning and reasoning correctly as is the laboratory worker.

Pharmacology is defined as "the science of medicines, their nature, preparation, administration and effects."

Therapeutics is defined as "the department of medical science that relates to the treatment of disease and the action of remedial agents on the human organization, both in health and disease."

Physiology is defined as 't'he science which treats of the functions of the living organism and its parts."

It would appear from the above definitions that the three departments are closely correlated. A knowledge of physiology is essential to the successful practice of medicine. It deals with the normal functions of the body, or rather of the organism in a healthy or normal condition.

Pharmacology is not taught in our model schools, neither is therapeutics, that is if we accept the definitions of the terms given by lexicographers. In fact therapeutics is not taught at all and pharmacology occupies but a brief space in the curriculum, hence Dr. Bastedo's plea for a greater and more intensive study of therapeutics.

He takes his text from McCrudden, as follows: "The teaching of thera-

peutics is one of the weakest points in the training of the medical student." Even whilst writing this a young friend in the senior class of a Class A college informs me he knew nothing whatever of therapeutics and, though he had taken some special work this summer in practice, he had absolutely no training in therapeutics, the entire stress being laid upon a correct diagnosis. I shall quote freely from Dr. Bastido's article, as it contains so much for which we as Eclectics have contended.

He lays stress upon the necessity of the fundamentals upon which the course in therapeutics is based so that the knowledge of physiology and pharmacology will be utilized in later years.

Of theoretical therapeutic teaching he says: "In this course it is necessary that the student should learn how to combat *every symptom* that may appear at every phase of *every stage* of each of the diseases of internal medicine. He does not study individual cases. But since only rarely in any patient do *all the symptoms require* treatment, it should be the effort of the teacher to impress this on the student by pointing out the probable course of the patient's illness if this or that symptom remains untreated." This quotation has certainly a very familiar sound. If we mistake not we can recall hearing such teaching back in 1881-82 and 1882-83. In fact, it forms the very basis or foundation of specific medication. But let us quote further. "Even hospital training leaves the graduate therapeutically unfit; and this may be accounted for, without reproach to the attending physicians, by the fact that today the hospital services are as large as they were when internal medicine was a much smaller subject. So that by the time the attending physician has ended his discussion of the complex and intellectually stimulating problems of diagnosis he lacks the time to do more than outline the treatment in a brief and routine fashion, and frequently leaves it entirely to the youthful house physician. Because of this tendency we see every day in our best hospitals cardiac patients given caffein all day to the verge of poisoning and as a consequence failing to get necessary sleep until deluged with dangerous doses of morphia; nephritis with edema, nauseated by large doses of salts to remove liquid, but not having liquid stools; patients with chronic constipation left to the chance shots of a sapient junior who makes evening rounds; and diabetics receiving diets in which all or most of the daily allowance of carbohydrates is given in only one of the meals, so that sugar unnecessarily continues in the twenty-four-hour urine. And the most astounding fact of all is that often the attending physician passes these things unnoticed. And internes with this training and students so trained we are turning out to practice medicine." This quotation simply emphasizes what the young physician previously mentioned said about his own experience in clinical instruction.

We feel that the gist of the article is contained in the next quotation and emphasizes the position occupied by Eclectics. It fortifies their contentions with the Medical Council of the American Medical Association ten or more years ago. It is often said that "the mills of the Gods grind slow but sure";

and so it seems from recent utterances from this council that many of our contentions years ago are now recognized as well founded. We plead for a recognition of the importance of therapeutics; we contended that time solely should not be the only element considered in the curiculum, but credits or units; in other words knowledge acquired, not lapsed time solely. The author says: "A physician's ability to treat his patients successfully is what constitutes his direct personal value to them, and it is the ultimate *raison d'etre* of his calling.

Granting, then, the truth of our text that today "the teaching of therapeutics is one of the weakest points in the training of the medical student," this is my ideal: *In the college curriculum and in the hospital have treatment given the consideration that it demands in the practice of medicine,* and have it taught both by special students of therapeutics and by those who would be considered by the medical world authorities in the sundry group of diseases.

We are glad indeed to note that a few at least are recognizing the extent to which therapeutic nihilism has gone. Knowledge of the fundamental branches is necessary to the practice of medicine. Diagnosis marks the proficiency or rather culture of the physician, yet, after all, what interests the patient most of all is the knowledge of whether the physician can relieve or cure him.

This nihilistic spirit has pervaded the profession to such an extent that many physicians appear absolutely helpless in the sick room. It reached its acme in the recent epidemic of influenza and no doubt was partially responsible for the large mortality. It is the result of the blind following of so-called authority or sole dependance upon the laboratory worker, ignoring entirely the results of clinical experience and teaching. M.

EMPIRICISM.

In an editorial in the *Journal of the American Medical Association* we find this statement, "Pharmacology and physiology have demonstrated the absurdity of many of the products of ancient pharmacy, and have substituted reason and experiment for empiricism. The ward walk and instruction of small groups of students in ward clinics afford opportunities for the teaching of therapeutics in conjunction with symptomatology and diagnosis; and on successive days the student sees the results of therapy on the patient. The small clinic and ward walk have added much to medical teaching, but at the same time have introduced individuality to a degree which sometimes borders on confusion." The truth is the effort of the clinical teacher is so centered on the diagnosis that no therapeutic measures are taught and hence the student's mind is hazy as regards therapeutics. It is a lamentable fact that most medical men learn therapeutics after engaging in active practice, and a large amount of it is learned from the detail man. Therapeutics, so far as the dominant school is concerned, is absolutely in the hands of our

large pharmaceutical houses. They make the investigations, experimentation and market the product, detailing uses, dosage, etc.

This uncertainty and extreme degree of nihilism was illustrated in the recent epidemic of influenza and is again illustrated in the many articles appearing in the journals. It permeates the army medical corps and is reflected in the teaching of our colleges.

I am not so sure that reason and experiment have replaced empiricism. Empiricism has furnished more remedies of real value and stability than has modern experiment or reason, and experimentation has not displaced them, but simply strengthened their place in medicine. This is not true of much that so-called scientific medicine has offered. It is no hard task to recall much that has been relegated to oblivion that was formerly announced as scientific.

There are indeed few remedies now in favor but what were formerly used empirically. Quinia, admitted by every one as a specific in intermittent fever, we find was used as early as 1639 by the Jesuits and priests in Spain and other parts of Europe, being introduced from Peru. Its value was thoroughly established long before the days of modern medicine and the laboratory. In fact so well established that its cultivation was encouraged in Java, India, Ceylon and elsewhere.

Belladonna has been recognized in medicine since the fifteenth century and has been used extensively for the past hundred years. Its physiological and therapeutical value was well established long before the advent of the laboratory expert. The latter has not changed in any way its therapeutic uses as formulated years ago.

Nux vomica and strychnia, whose physiological action is as well understood today as is belladonna, is said to have been used as a remedy by the Arabian physicians. It was studied in England as early as 1818.

Ergot is said to have been used by the peasants in Europe in childbirth three hundred years ago. Thus we might continue a long line of remedies that were established long before the physiological and pharmacological laboratory revealed their physiological action, and instead of displacing them they have simply strengthened the clear reasoning and clinical observations of the empiricist. His was a reasoning founded upon close observation and clinical study upon the patient at the bedside rather than experimentation upon the guinea pig and reactions in the beaker glass and test tube.

Reason and experiment, instead of replacing empiricism, have simply strengthened and demonstrated how lucid and clear were their reasoning powers.

It is to the empiricist medicine owes much of what it possesses today.

M.

THE STUDY OF MEDICINE.

Much has been written recently about this subject. Much added interest was aroused by the war. Criticism of many features of medical education has been indulged in very freely.

Complaint from some is directed to inability of medical men in the army to make a diagnosis; from others the lack of knowledge of medicine itself would indicate a shortcoming of those who were inducted into the medical departmentof the army. Some have gone so far as to indulge themselves in specific demands for improvements in the college curriculum so as to meet the needs as they see them.

Out of all this we hope some good will result. There are those who for years have foisted upon the medical world their ideas of an ideal college curriculum and have gone out of their way to enforce some of their concepts on medical colleges, gradings, standards and many other things in the name of better medical education. We would now wonder who is to blame for all this apparent shortcoming in such a time of need?

There are two points which it would seem to us might be suggestive and bear discussion.

First, how many general practitioners, such as answered the country's call, are in the habit of systematically analyzing and recording their diagnostic findings? I venture the opinion that less than 5 per cent. do so, not because of inability to make and keep such records, but because few busy practitioners can indulge themselves in the time necessary or enjoy the assistance of capable office help to do so for them.

Again, the usual fees paid to a physician would not justify him in making such use of his time. It may be said in reply to this that each patient is entitled to such consideration and the time, care and analysis necessary for such a record, and while we grant that this is true, yet it is a part of education—not medical, however—to bring the people to the point of paying for time and advice as well as for a prescription or medicine.

But after all is said and done—after a thorough and well recorded diagnosis—what is the good of it if this same doctor who has heretofore had access to his own laboratory or a good pharmacist and who has had success attend his ministrations to the sick in his care—what is the advantage of a record if this same doctor has to prescribe a pill or a mixture by number, according to the dictates of a superior officer who may know less about the case in hand than the underling he commands?

How can an astute diagnostician succeed when he must prescribe a compound by number when the ingredients may have little or no relation to the conditions existing in the patient?

My son, any man's son, who is good enough to shoulder a musket, leave home, business and loved ones, who is called possibly to make the "supreme sacrifice," is entitled to the best possible at the hands of the medical department of the army. Then what about medical education *per se?*

Where is the fault if the medical department must have some excuse for

having poor results? What proportion of the medical officers were from the dominant school of medicane, and where does the most of the just criticism lodge? BEST.

NEWS AND NOTES.

Arkansas.

The Governor has appointed a new Eclectic board, consisting of J. E. Stevenson, Little Rock; J. K. Jackson, Little Rock; Samuel Boyce, Little Rock; C. H. Parks, Little Rock; C. E. Spann, Altheimer; A. C. Prichard, Hot Springs, and R. C. Norris, Tuckerson.

California.

Dr. Chas. O. Hanson has removed from Pasadena to Honolulu, H. I.

Dr. F. C. Piersol has removed from Mendocino to Claremont.

Dr. A. A. Prall has removed from Anaheim to Huntington Park.

Dr. W. E. Daniels has removed from Madison, S. D., to Long Beach.

Dr. John Buckingham has changed his address to 2311½ S. Vermont Avenue, Los Angeles.

Dr. Harriett G. McGraw has removed from Los Angeles to Tyron, Neb.

Dr. H. T. Webster has moved to 1414 East Fourth Street, Santa Ana.

Dr. Sophia Billenkamp has changed her address from Galt to Lodi, R. F. D. No. 2.

Dr. Leland Welbourn has located at Van Mays, Calif.

Dr. S. M. Atkins has returned from army service, and is located in Hollywood.

Dr. L. B. Weatherbee is again practicing, being located at Antioch.

Dr. H. T .Cox, of 5928 York Boulevard, Los Angeles, spent vacation during September visiting various places in Southern California.

Dr. A. S. Brackett has removed from 1054 Georgia Street to 3851 Denker Avenue, Los Angeles.

Dr. J. E. Shearer has removed from Cloverdale to Tillamook, Ore.

Dr. T. C. Young, of Glendale, spent his summer vacation in the mountainous country of Lassen County hunting and fishing.

Dr. F. W. West, of 5928 York Boulevard, Los Angeles, spent the month of August touring over the coast region of California.

Dr. A. P. Baird, of 809 Eagle Rock Avenue, Los Angeles, had a long vacation of two months, during which time he and Mrs. Baird toured the Sierra Nevada highways and spent some time in Yosemite Valley viewing its wonders.

Dr. H. V. Brown, of Los Angeles, has been reappointed to the California State Board of Medical Examiners and is the Eclectic representative on the board. Dr. Brown has previously served five years upon the board with good credit.

Dr. Alphonette Goff, graduate of the California Eclectic Medical College, class 1913, is now located with Dr. T. C. Young at Glendale.

Dr. O. C. Welbourn, of Los Angeles, spent his vacation during August at Big Bear Lake.

Georgia.

Dr. A. F. White, of Flovilla, has been reappointed on the State Board of Medical Examiners.

Dr. Dan Griffith, of Atlanta, has been sick with typhoid fever.

Illinois.

Dr. Chas. McLaughlin has returned from overseas duty and is now located at Curran.

The University of Illinois College of Medicine reports that for all classes matriculating in 1917 and thereafter the students are required to complete a five-year course, including a year's internship in a hospital, before the M.D. degree will be conferred. This is the ninth medical school to adopt this requirement.

The Remington Medal, given annually to a member of the American Pharmaceutical Association who makes the most notable contribution toward the advancement of pharmacy, was awarded to Prof. James P. Beal, dean of the College of Pharmacy of the University of Illinois, Chicago, at the sixty-seventh annual meeting of the American Pharmaceutical Association held in New York City.

The health commissioner of Chicago states that physicians of the city in one month gave more than 103,000 prescriptions containing opium or its derivatives to be employed in the treatment of influenza.

Infantile paralysis is said to have appeared in Putnam, Bureau and LaSalle Counties, where several cases have been reported. Dr. Charles E. Crawford has been sent by the state department of health to take charge of the situation.

Dr. Anna F. Novak has removed from 1412 W. 18th Street to 2402 S. Millard Avenue, Chicago.

Iowa.

Dr. George E. Severs, Centerville, has been appointed president of the state board of health succeeding Dr. Walter L. Bierring, Des Moines.

Indiana.

Dr. J. E. McCabe has removed from Buck Creek to Otterbein.

From September 1, 1917, to December 31, 1918, 274 patients were admitted to Sunnyside, the Marion County Tuberculosis Sanatorium at Oaklandon. At the time this report was made, 202 of the patients had been discharged. Statistics show that ninety of the victims were between 20 and 30 years old; fifty-seven years between 30 and 40 years, and thirty-eight were between 11 and 20 years. Housewives and domestics formed the largest class affected, sixtytwo of them being admitted. Skilled and unskilled workmen fell victims alike, forty-six of each being patients. Fifty-one schoolchildren were given treatment. The Marion County Tuberculosis Association has announced the appointment of a committee, which, in its campaign against

disease, will have as its goal the erection of a tuberculosis hospital for receiving advanced cases of the disease. An estimate places the total of tuberculous persons in Marion County between 6,000 and 7,000. For the 300 advanced cases there are now available only twenty-five beds at the Flower Mission. No place is available in the county for the care of the colored patients in the advanced stages of the disease.

Nebraska.

Dr. Robert C. Olney has located at the Lincoln Sanitarium, Lincoln.

Dr. J. J. Rizk has removed his office to 1417 O St., Lincoln.

M. W. Deffenbach has removed from Grand Island to Fairmont.

H. E. McKenzie has removed from Wynot to 3700 Orleans Ave., Sioux City, Iowa.

Dr. Asa Fletcher has changed his address from 1041 North 33rd St. to 3328 N. 27th St., Omaha.

New Jersey.

Under bills passed in the House, April 8th, a physician's certificate becomes a prerequisite to marriage in New Jersey. The purpose of the bill is to prevent the marriage of persons afflicted with contagious or infectious social diseases. The bill provides that the fee of a physician for making the necessary examination before the issuance of a certificate shall not exceed $2.50, and county physicians will be required to make such examinations gratuitously to indigent applicants. The bill was endorsed by the officials of the U. S. Public Health Service and state department of health, and was approved by the Surgeon-Generals of the army and navy. But why should "indigents" be permitted to marry?

New York.

The bureau of preventable diseases of the New York City Health Department, under the direction of Dr. Louis I. Harris, has just made public the results of a pioneer investigation into some of the medical aspects of the high cost of living. An investigation of the living conditions of 2,084 families visited by public health nurses, primarily for the purpose of supervising cases of tuberculosis, diptheria and scarlet fever, forms the basis of this report. The families consisted of 4,991 adults and 5,612 children, an average of 5.08 persons and 2.69 children per family. It is believed that these families represent a fairly typical cross-section of conditions in New York City. Of these families 51 per cent. had a total income not exceeding $900 a year and a total of 72 per cent. had an income not exceeding $1,200 a year. A study of the increased cost of living on the normal dietary of the families showed that in 37 per cent. of these families meat was entirely eliminated; in a slightly larger percentage eggs were entirely eliminated. In 293 families the use of bottled milk was given up; in 71 per cent. of the families the amount of milk consumed by the children was considerably reduced. In 370 families the use of butter was eliminated and sugar was omitted from the dietary of children in seventy-one of these families. In these families

the effect of these conditions of daily life on sickness and on the period of convalescence was studied. It was found that in 287 cases out of a total of 2,183 cases of illness, or in a little over 13 per cent., recovery was definitely retarded because of the increased cost of the essentials of life.

Governor Smith broke ground, September 13, for a new state hospital for the insane at Marcy, near Utica. The site of the institution comprises 930 acres of the best farm land in the state, and the legislature has authorized the expenditure of $2,000,000 on the buildings, which will house 3,000 patients. Abundant provision has been made for a water supply and sewage disposal at Marcy so that a setback such as that encountered in the attempt to establish a state hospital at Mohansic may be avoided. The governor in his address told of plans that are being made by the hospital commission for a state psychopathic hospital in New York City, which shall be the research department for the state hospitals for scientific studies into the causes and treatment of insanity, and which will also be used for the temporary care of the less serious cases of mental disorders. Among the other speakers were Dr. Charles W. Pilgrim, Poughkeepsie, and Dr. Walter B. James, New York City.

Oklahoma.

B. H. Moore, M. D., has located at Durant.

Ohio.

Dr. R. S. Postle has recently returned from army service and resumed his practice at 946½ East Market street, Akron.

Dr. M. F. Walker has returned from army service and opened an office at Madison Road and Appleton Street, Oakley, Cincinnati.

Dr. H. F. Minshull has located at New Lexington.

Dr. Chas. J. Miller has located at Bowerston.

Dr. Everett P. Trittschuh has located at Lewisburg.

Dr. Fred M. Rankin has left the Metropolitan Hospital in New York City and taken an interneship at the City Hospital, Springfield.

Dr. Wm. A. Stoutenborough and family enjoyed a vacation in the mountains near Denver, Colo.

Dr. J. C. Siddall has opened an office in Carey.

Walter O. Pontius has removed from Columbus to Williamson, W. Va.

Dr. S. M. Coryell is serving an interneship at the Fairview Park Hospital in Cleveland.

Dr. O'Hara and family, of Lewisburg, is spending the winter in Southern California.

Dr. Chas. W. Russell, of Springfield, is reported seriously ill at the home of his sister in Burton, O.

Under the Hughes Law two physicians are to be selected on each board of five members. We note the following:

Auglaize County—R. C. Hunter, Wapakoneta.

Clinton—H. E. Gibson, Blanchester.

Coshocton—C. M. Neldon, Coshocton.
Lake—J. V. Winans, Madison.
Marion—N. Sifrit, LaRue.
Sandusky—C. Beck, Clyde.
Wood—F. Whitacre, Prairie Depot.
Wyandot—C. R. Van Buren, Carey.

Obituary—Dr. Ralph H. Powers, E. M. C. 1915, Captain, M. C., A. E. F., was killed in action at Ust Padenga, Russia, on January 23, 1919. He was awarded the D. S. C. for extraordinary heroism while under enemy fire. He also received a fine tribute from the Commanding Officer of the British forces, with which the Americans served. While in England, Dr. Powers went up to London and bought quite a number of Lloyd's specifics, and treated the Russian peasants and soldiers who had the flu with marked success, getting much better results than the men who used the treatment adopted by the army. He was loyal always, and thought a lot of his Alma Mater.

Dr. R. A. Kidd, Superintendent of the McMillen Sanitarium at Shepard, Ohio, a suburb of Columbus, has just announced the completion of a new brick, fireproof, sanitary addition to the Sanitarium, which now gives them a capacity of forty patients, each patient having a separate room. This is the Sanitarium originally established by Dr. Bishop McMillen, a graduate of the E. M. C., and conducted by him so successfully for so many years.

Ohio State Medical Board.—The regular quarterly meeting was held in Columbus, October 6th and 7th, all members present except Dr. T. A. McCann. The time of the next regular examination was set for December 2, 3 and 4 in Columbus.

The Training Schools of St. Rita's Hospital, Lima, and Mercy Hospital, Toledo, were placed on the recognized list.

Ida May Hickox, of Steubenville, was appointed as chief examiner on the Nurses Board, vice Miss Friend, who resigned.

Reciprocity agreement for physicians was arranged for with the State of Washington.

The following reciprocity applications, on the basis of previous State examinations, were granted:

A. D. Armsted, Howard Univ. 1918, D. C. '19, intended residence, Youngstown.
R. Barnwell, St. Louis Univ. '17, Mo.; to Cuyahoga Falls.
T. R. Beaver, Ind. Univ. '11, Ind. '11, to Akron.
T. J. Dehy, St. Louis Univ. '14, Ind. '14, to Cleveland.
L. R. Effler, Columbia Univ. '13, N. Y. '13, to Toledo.
C. S. Emery, Univ. Mich. Hom. '18, Mich. '18, to Kenton.
S. J. Firestone, Jr., Fordham '16, Penn. '17, to Akron.
E. C. Fischbein, Cornell '15, N. Y. '15, to Dayton.
C. Fischer, Univ. Ills. '12, Ills. '12, to Ft. Recovery.

P. J. Fuzy, Univ. Buffalo '18, N. Y. '18, to Youngstown.
S. D. Giffen, Columbia '20, N. Y. '02, to Hamilton.
J. J. Hoodlett, Hahnemann Chicago '17, Ills. '17, to Nelsonville.
C. E. Howe, Hahnemann Chicago '16, Ills. '16, to Athens.
A. M. Lowenstein, Albany M. C. '08, N. Y. '08, to Cleveland.
H. E. McClenahan, Univ. Mich. '15, Mich. '15, to Youngstown.
J. L. McEvitt, Yale '14, N. Y. '17, to Akron.
L. Mark, Marquette Univ. '15, Wis. '15, to McConnellsville.
D. F. Mathias, Tulane Univ. '15, Miss. '15, to Akron.
G. R. Micklethwaite, Johns Hopkins '17, Md. '17, to Portsmouth.
J. A. Munzer, St. Louis Univ. '18, Mo. '18, to Toledo.
H. M. O'Brien, St. Louis Univ. '18, Mo. '18, to Cleveland.
W. T. Palchanis, Jefferson '16, Penn. '17, to Columbus.
N. S. Reed, Univ. Pittsburgh '10, Penn. '10, to Bellaire.
H. W. Reid, Johns Hopkins '16, Md. '16, to Cincinnati.
G. F. Rusch, Univ. Buffalo '08, N. Y. '08, to Akron.
J. V. Rice, Univ. Louisville '10, Ky. '17, to Akron.
D. R. Robert, Columbia Univ. '11, N. Y. '11, to Dayton.
D. Rose, Jefferson '92, Penn. '95, to Columbiana County.
L. H. Sentiff, Univ. Ala. '04, Ala. '04, to Cincinnati.
R. E. Stifel, Johns Hopkins '16, Md. '16, to Cleveland.
A. L. Stotter, Rush '19, Ills. '19, to Cleveland.
O. J. Walker, Univ. Pittsburg '15, Okla. '16, to Youngstown.
G. P. Willett, Univ. Mich. '18, Mich. '18, to Toledo.
S. V. Berkley, M. C. Va. '13, Va. '14, to Akron.

The following certificates were issued on previous diploma registration:
E. J. Barcall, Northwestern Univ. Chicago '93, Ills. '93.
N. D. Jobes, Ec. Med. Coll. '88, W. Va. '88, to Bucyrus.
F. I. Yates, Ky. S of M. '02, Ky. 03, to Cincinnati.
Osteopathic—E. L. Jay, Amer. S. Ost. '14, Texas Ex '14, to Akron.

Several cult applications were passed, and several rejected. Several physicians appeared before the Board to explain their advertising practices. illegal use of narcotics, and narcotic addictions. Two were allowed to continue practicing, pending their surrender of their Harrison Anti-Narcotic licenses, permitting their purchase of the drug.

The certificate of Dr. G. E. Brown, of Cleveland, was revoked for illegal advertising and lending his license to an unauthorized practitioner.

The license of Harry Ben Bolt, a chiropractor of Bellefontaine, was revoked for illegal advertising.

The cases of several other advertisers were continued pending additional information.

Pennsylvania.

Dr. C. L. Johnstonbaugh, of Bethlehem, has been reappointed as a member of the Bureau of Medical Education and Licensure.

South Dakota.

W. E. Daniels, M.D., has removed from Madison, S. D., to Long Beach, Calif.

H. W. Kellogg, W.D., has removed from Madison to Milbank, S. D., where he takes charge of the Sisters Hospital.

Texas.

Dr. J. D. Dodge has removed from Jacksonville, Fla., to Aransas Pass.

Dr. H. H. Blankmeyer, of Aransas Pass, was a sufferer from the September storm, most of his possessions being swept away.

Wisconsin.

Charles W. Rodecker, Holcombe, and John M. Dodd, Ashland, have been reappointed members of the state board of medical examiners.

Wyoming.

Dr. Eugene D. Geer has removed from Pennsylvania to Rock River, Wyoming.

MISCELLANEOUS.

The High Cost of Patriotism.

Under the above heading The Cincinnati Enquirer in a recent issue published the following editorial:

"While groaning at the extravagant price they have to pay for every possible article of luxury or necessity, it would be wise for all good citizens to bestow a more than passing thought upon the cost of their patriotism to many, if not all, of our soldiers. Here, for example, is an Ohio physician whose income during the year before the war had amounted to a cool $12,000, and who gave up his lucrative practice to go to war. At the end of a year or so he came back to find his practice in the hands of his competitors, and himself compelled to begin at the foot of the ladder to secure another set of patients. He figures, and it would seem correctly, that adding to his actual loss of income during his absence, the shrinkage of his income after his return, the cost of his military outfit and the expense of maintaining his family above his salary in the service, that his patriotism cost him $20,000, and yet he did not whimper!

"The only thing that hurt him was the selfishness of those stay-at-home rivals into whose hands his business had dropped like a ripened plum, and who clung to his former patrons with tooth and nail as their legitimate spoils.

"To regard which form of ingratitude and injustice without resentment is an evidence of splendid patriotism.

Any doctor or any lawyer who deliberately and with intention clings to the clients of a soldier in the great war to his detriment upon return, deserves contempt."

In a memorandum published late in 1918 Sir George Newman, chief medical officer of the London Board of Education, made the following statement relative to the most essential needs in medical education as revealed by the world war:

"There must be from time to time and in accordance with the direction and establishment of new medical knowledge or the requirements of the times, reasoned effort to eliminate the unnecessary and the redundant and to concentrate upon the essential things. . . . All through the curriculum we need to impose less on the memory of the student, and seek rather to draw out his mind and faculties, his interest and perception, compelling him to do things for himself with his own hands and his own head, and to observe and experiment, to study intensively rather than extensively, to think and wonder and investigate for himself. This is to educate him and give him independence, to add experience to knowledge and wisdom to experience, and above all to foster the love of learning." Sir Gorge emphasized the following points:

(*a*) Be strong in physiology, anatomy, and pathology—the bed rock of medicine.

(*b*) Have a thorough training in physical signs and clinical examination.

(*c*) Concentrate more on outpatient department, on children's ailments, on subjective symptoms and on anything which will bring the student into personal touch with the beginnings of disease.

(*d*) Pay wider attention to the question of therapeutics nonmedical as well as medicinal.

(*e*) Lay special stress on preventive medicine, dealing with ordinary as well as infectious diseases. In other words, death under fifty must be prevented.

(*f*) Provide for efficient postgraduate teaching.

The executive committee of the National Tuberculosis Association met at the Russell Sage Foundation in New York City, September 13, at which time a survey of the tuberculosis situation in the United States was presented which shows that the country is face to face with a condition more menacing to the people than actual warfare. This survey shows an annual death rate of 150,000 from tuberculosis in the United States and more than 1,000,000 active cases in the nation. To combat the spread of the disease the committee asserts that an intensive national campaign is necessary. Funds for this campaign will be sought by a ten-day sale of Red Cross seals, beginning December 1. The total of the state budgets will be more than $6,500,000. In the course of the discussion, it was pointed out that the death rate of 150,000 a year from one preventable disease means the sacrifice of more lives than the United States Army lost in the year it was actively engaged in the war. An educational campaign has been formulated which will be extended to every part of the country, with the view of

impressing on the people that tuberculosis is preventable and curable and of inducing them to take measures to protect themselves. Plans to care for all afflicted persons will be pressed and a special effort will be made to search out incipient cases.

At one of the recent meetings of the Paris Surgical Society, Dr. Lenormant, hospital surgeon and agrege professor of the Paris School of Medicine, contributed an interesting communication on the subject of tetanus and antitentanic injections. The war, in this case, as in many other matters, furnished a wide field for the gaining of experience, and it is important to consider carefully the question of antitetanic serotherapy of which Lenormant is an earnest advocate. First, one must consider the limits of its use both as to time and as to quantity. It is without doubt a matter of paramount necessity to suppress the further elaboration of toxins by the removal of foreign bodies, but it is wrong to assume that such removal brings about the sterilization of the wounds. It is therefore indispensible that the serum be continued in doses sufficiently large (20 c. c.) and that the treatment be kept up as long as the wounds are suppurating. Lenormant saw cases of tetanus at the beginning of the war, in September, 1914, at Montdidier; then again in 1916, while he was chief surgeon of the sector in the Fifth Region and received directly from the front the moderately wounded. He observed under these conditions thirty cases of tetanus, almost all of them being the late cases which developed from five to eight weeks or more after the wounding. A comparison of these two series of cases is very striking. In 1914 the cases were generalized and were all fatal. In 1916 the tetanus was almost always localized at the outset (painful spasmodic contractures in the wounded member), rarely complicated by trismus, but if so, resulting in quick death. The mortality was only 50 per cent., as compared with 100 per cent. in 1914. The wounded men of the second series had received repeated injections of antitetanic serum. Tetanus immediately became less frequent and less severe in its manifestations and often remained localized. Under these circumstances how can one deny the value of the serum? However, Lenormant reported having seen two soldiers who, in spit of repeated injections of antitetanic serum, presented, one month after being wounded, a typical tetanus with opisthotonos and generalized spasmodic contractures, but even these cases ended with recovery. The serum seems, therefore, to have been incapable of preventing the appearance of the tetanus, although it did not lessen its gravity. In delayed operations the practice of injecting antitetanic serum as a preventive seems to be an excellent use, for one must not attach too great importance to anaphylactic accidents, and it is better to give a patient an injection unnecessarily than to have a case of tetanus break out. Pierre Delbet is of the same opinion. He injects thirty c.c. at each injection. The preponderance of localized cases and the benign character of the tetanus as observed in 1916 prove that the serum brought about a relative immunity in the soldiers. As for anaphylactic accidents, Delbet

says he has never seen any. He called attention to the fact, moreover, that one should not mistake serum accidents for anaphylactic accidents.

Professor Quenu and Dr. Walther, agrege professor at the Paris School of Medicine, have never used preventive injections of antitetanic serum in connection with delayed operations on the war wounded, and yet they have never seen any cases of tetanus develop. Walther has been for several years the director of an important service for the reparation of scars, and has performed a considerable number of delayed operations; yet he has had no cases of tetanus. Likewise, Dr. Petit, who has extracted in delayed operations a considerable number of intrathoracic projectiles, has encountered no cases.

Dr. Sieur, a university professor of Val-de-Grace, continued the discussion, remarking that Roux and Vaillard long since declared that the injection of the serum alone was not sufficient, for by the injection only a certain unknown quantity of the toxins would be neutralized. If the operation has not been complete in every particular, if a focus of infection persists, new toxins develop and tetanus appears. The proper course, therefore, is to make sure, on the one hand, of careful surgical treatment, and, on the other hand, to provide for repeated injections of serum.

Four measures appropriating funds and authorizing the United States Public Health Service to investigate and combat a recurrence of the influenza epidemic, are now before congress. Senator Warren G. Harding of Ohio has introduced a joint resolution appropriating $5,000,000 for an investigation of influenza and pneumonia. His measure cites that the recent influenza epidemic caused 550,000 deaths in the United States. The Public Health Service and research institutions are authorized to make this investigation. A bill introduced in the House by Congressman Simeon D. Fess of Ohio, authorizes the Public Health Service and the medical departments of both the Army and the Navy to investigate and combat the disease and appropriates $1,500,000 for this purpose. Congressman William W. Larsen of Georgia and Congressman Black of Texas have introduced similar bills for making an investigation of influenza and allied subjects. The Larsen and Black measures carry an appropriation of $500,000 each. All four measures charge the United States Public Health Service with carrying out the provisions of the act, although cooperation with he army and navy medical departments is advised.

The New York Milk Commission has recently issued a report on the infant mortality rates of the different cities of the United States for the year 1918. This report shows that the infant death rate for New York City was 92 per thousand living births. Although the estimates show that the death rate for the country increased seven points last year, the milk commis-

sion believes these rates are remarkably low when all the elements conspiring against the baby are considered. The infant mortality rate for seventy-nine cities with populations under 50,000 was 97.2. The rate for thirty-eight cities of between 50,000 and 100,000 was 113.8, and that for forty-five cities of 100,000 population was 103.5. The average baby death rate for the registration area of the United States is 104. Twenty-two of the cities of 100,000 are above this average, and twenty-two are below. The rates for a number of the larger cities are reported as follows:

Chicago, 104.3; Philadelphia, 126; Boston, 114.9; Baltimore, 147.8; Pittsburgh, 122.5; Buffalo, 121.5; Milwaukee, 108.2; Cincinnati, 104.1; Newark, N. ., 104.7; New Orleans, 123.3; Washington, D. C., 110.9; Jersey City, 118.7; Louisville, Ky., 117.3; Denver, 107.3; Syracuse, N. Y., 117.4; Birmingham, Ala., 133.5; Memphis, Tenn., 145; Scranton, Pa., 144.3; Richmond, Va., 146.3; Fall River, 161.3; Lowell, Mass., 159.1; Albany, N. Y., 107.4. Only three cities reported baby death rates below 50. These cities are all of the class below 50,000. Brookline, Mass., has the lowest rate, 35.4; Madison, Wis., is next with 38.1, and Pasadena, Calif., third, with 43.8.

Life insurance companies which have been insuring total abstainers exclusively, or which have a special department for total abstainers, declare that the mortality of this class of risks is a third less than the general mortality. Experience has shown that the general mortality is 74 per cent. of the expected, while the mortality of total abstainers is only 45 per cent. of the expected, and the mortality of the drinker is from 139 per cent. to 174 per cent. of the expected. For instance, in an exposure of 100,000 lives entering at age 20, the average longevity is as follows: Total abstainers, 64 years; moderate drinkers, 51 years; habitual drinkers, 35 years. Taking 100,000 lives from the ages of 25 to 65, the annual deaths of the general class are 1,390, while that of the abstainers is but 786.

Influenza affected 700,000 out of Switzerland's population of 4,000,000, according to official reports received by the United States Public Health Service. As was the case in England, there were two distinct waves, the first reaching a crest in July and the second in October. "The occurrence of these waves in practically all parts of the world where the pandemic prevailed is most puzzling," said Surgeon General Blue. "It is difficult to conceive of any external—i. e., environmental—influence acting so uniformly throughout the world, and that the virus should everywhere show these peculiar variations in infectivity and virulence is certainly most remarkable."

A joint influenza committee has been created to study the epidemic and to make comparable, so far as possible, the influenza data gathered by the government departments. The members of this committee, as designated by the Surgeon-General of the Army, the Surgeon-General of the Navy,

the Surgeon-General of the Public Health Service, and the Director of the Census, are: Dr. William H. Davis, chairman, and Mr. C. S. Sloane, representing the Bureau of the Census; Dr. Wade H. Frost and Mr. Edgar Sydenstricker, of the Public Health Service; Colonel D. C. Howard, Colonel F. F. Russell and Lieutenant Colonel A. G. Love, United States Army; Lieutenant Commander J. R. Phelps and Surgeon Carroll Fox, United States Navy.

A fund of $200,000 for research study against influenza has just been given Hahnemann Medical College, Philadelphia.

The American army in France gained 32,000,000 pounds in weight, according to estimates obtained by army officials in Washington. This is an average of about 25 pounds to the man. The increased weight is supposed to be the result of outdoor exercise and living. What to do with this increased brawn and muscle is the question that is disturbing army officials. It is assumed that men in army camps in America have gained in weight proportionately. Here is a great addition to the muscle of young America which will be applied to industry. It also increases the living problem, as this increased weight means additional food for sustenance. Army officers say if the war had gone on the American army would have almost doubled in weight. No one gets fat in the army, so this increase means good working muscle.

America is threatened with a plague worse than disease—a taint which generations will not remove—thru the admission of defective alien immigrants to the United States, declares Mrs. Marian K. Clark, chief investigator for the Bureau of Industries and Immigration, New York State Industrial Commission. Alarming increases in the number of physically and mentally defective aliens who have come to the United States in the last five years has placed on the state of New York a burden of taxes for the support of dependent alien defectives and is producing harmful effects upon the country at large, she charges. Aliens enter this country who are physically unfit to survive the complexities of modern life. Hundreds enter the insane asylums. Many are carriers of diseases, or themselves are afflicted with loathsome and dangerous diseases. Others are mentally or physically subnormal, or excludable from other causes. But for various reasons orders of deportation are suspended in many instances. Mrs. Clark protests against the admission of questionable subjects in an article published in the June issue of *Modern Medicine*. She shows that in the four years from 1914 to 1918, 1,723,000 insance aliens were admitted to the United States, and 195 who were suffering from loathsome or dangerous diseases. There were 2,005 excludable from other causes as liable to become public charges.

The laxity of the immigration laws and regulations has placed upon the country a social, moral, and economic menace which the taxpayers, individ-

uals and posterity must shoulder, according to Mrs. Marian K. Clark, chief-investigator, Bureau of Industries and Immigration, New York State Industrial Commission. If we are to retain our national stability an amendment must be read into the immigration laws providing for the mandatory exclusion of all unfit and defective aliens, asserts Mrs. Clark in *Modern Medicine.*

The vast use of tobacco and other narcotics in the United States was brought out by Internal Revenue Commissioner Roper at a conference with his divisional chiefs. Mr. Roper said that the nation's consumption of drugs was in excess of that of China, comparatively. Reports by officials of the bureau show that the use of cigarettes had increased 252 per cent. since 1912, with only 12 per cent. increase in population. Deputy Commissioner Gaylord said that 490,000 pounds of opium and 1,000,000 pounds of cocoa leaves and its products have been consumed in this country in the past year, with an expenditure of $20,000,000.

Arterial *hypotension* is usually associated with tuberculosis pulmonalis or any disease which results in a general debility, especially of the nervous system, such as neurasthenia, shock or exhaustion of the nerve centers. Venesection and diarrhea present low blood pressure, but these are transitory. Acute or chronic toxemias, while ordinarily presenting increased arterial tension, may be accompanied by hypotension on account of the direct action of their poisons upon the vasomotor centers.

While we expect to find that most *asthenic* cases will present a marked *hypotension,* a persistence in this condition should lead us to suspect tuberculosis, especially where the pulse pressure remains below 20 or 25. *Myocardial weakness* will produce a similar condition, as may also cases of aortic stenosis of any marked degree. *Aneurysm* may produce a wide variance between the tension on the two sides of the body.

In *aortic regurgitation* we invariably find that the pulse pressure is extremely high, often registering half again as high as the diastolic pressure, which, itself, is usually very low. This is easily accounted for by the fact that there is little to sustain the backward pressure of the blood stream during diastole, thus giving a low diastolic reading. While we usually find the systolic pressure near the normal point in this form of heart lesion, it is possible to find the diastolic normal with a greatly increased systolic pressure. At any rate, the high pulse pressure as found here is almost pathognomonic.

In *myocarial degeneration* we naturally expect to find a degree of hypotension commensurate with the amount of degeneration. This is true only so far as it is uncomplicated by such diseases as arteriosclerosis or nephritis. When they make their appearance, as they usually do in connection with

degenerated heart muscle, there is a change to hypertension as the disease progresses, and this continues as long as the power of the heart lasts. When compensation begins to fail, the systolic pressure is again lowered, but the diastolic usually remains the same or even a little higher. Their relationship is thus disturbed and the pulse pressure is reduced to the danger point In chronic myocarditis, there may be hypertension and this, when it occurs, is probably due to general stasis and asphyxiation of the medullary centers, which results in stimulation of the vasomotor centers and constriction of the arterioles.—W. J. Evans, *Amer. Med.*

The Weekly Health Index for March 4, 1919, issued by the Bureau of the Census, shows that in thirty-one of the larger cities of the United States with a population of over 19½ million for the period of twenty-five weeks from Sept. 8, 1918, to March 1, 1919, inclusive, there were 72,009 deaths from influenza and 49,598 from pneumonia in all forms, giving, for the two diseases, a rate of 6.2 per thousand of population. There was said to be an excess of deaths from all causes of 96,679, or 5.0 per thousand of population as compared with the deaths and death rate for 1919.

In a report issued from the office of the Surgeon-General of the Army July 8, it is stated that the staff supervising the work of educational service for the benefit of wounded soldiers at forty army hospitals totals 2,385 persons, consisting of 252 officers, 509 noncommissioned officers, 241 enlisted men, 1,274 reconstruction aids, 78 male and 31 female civilian employees. The largest staff was at Fort Sheridan, Ill., the number engaged in the work being 181. Walter Reed General Hospital at Washington, D. C., had the second largest staff—138. Of 2,524 patients receiving surgeon's certificate of discharge, 2,408 were able to resume their old occupations, or were not in need of retraining. Enrolments in war artcrafts increased from 18,829 in April to 20,641 in May. Those in war academic studies increased from 30,358 to 31,850. The grand total of students in all forms of education was 56,850.

According to a report of the National Industrial Conference Board, just issued, the cost of living for American wage earners was 71 per cent. higher in July, 1919 ,than at the outbreak of the world war in July, 1914. The advance is approximately 6 per cent. since March, 1919, and 12 per cent. since June, 1918. In making this estimate, the costs of food, shelter, clothing, fuel, heat, light and sundries are taken into account. In judging prices of food the board uses the average retail prices as collected for the United States Bureau of Labor statistics. The remaining figures used were obtained through questionnaires to merchants, real estate brokers ad others regularly selling the items concerned. Among food items which have made

particular advances since June, 1918, were: coffee, 41 per cent.; butter, 24 per cent.; sugar, 16 per cent., and milk, 15 per cent. Sugar, pork, potatoes, flour and lard advanced more than 100 per cent. from June, 1913, to June, 1919. The average rise in rents since 1914 has been 28 per cent. in the last five years. Fuel, heat and light have advanced 57 per cent. in five years. Sundries, including tobacco, candy, ice cream, drugs, household furnishings and supplies have advanced in general a total of 63 per cent. in five years, and 5 per cent. in the last three years.

According to an article in the New York *Christian Advocate,* May 29, 1919, the Methodists now have forty-seven hospitals, with a property and endowment value of $16,000,000, at which 100,000 patients, exclusive of outpatients, are treated annually. The creation of a board of philanthropies, to have general charge of the hospitals and related institutions, will be condesired in the next quadrennial conference, which will meet at Oes Moines, Iowa, in 1920.

Enforcement of the Harrison Narcotic Law.

Under date of July 31, 1919, the commissioner of internal revenue issued to collectors of internal revenue a circular letter of instruction relative to the enforcement of the Harrison Narcotic Law with regard to which recent decisions of the Supreme Court of the United States have a vital bearing. While vigorous enforcement of the Narcotic Law is greatly needed, and must obtain, it is not to be enforced in such a manner as to bring unwarranted suffering. Renewed attention is called in the circular to the fact that the constitutionality of the Harrison Narcotic Law has been clearly upheld by several decisions of the Supreme Court of the United States, as already stated. It has also been held by the Supreme Court that an order for narcotics sisued by a practitioner to a habitual user for the purpose of providing him with a supply sufficient to keep him comfortable and not with a view to curing him of the habit renders the practitioner guilty of an indictable offense.

The decision of the court in the Thompson case affirmed the conviction of a physician who furnished narcotics to an addict, although the defense was set up that the narcotics were furnished in decreasing quantities in an attempt to cure addiction. In opposition to the physician's defense it was shown by the testimony that the physician did not personally attend the addict or give him personal attention sufficient to prove that he was practicing in good faith. This is an important decision and indicates that the courts do not intend to allow the defense of professional treatment to hold without supporting testimony that bona fide personal supervision was given in the case. In the Oliver case the charge to the jury as delivered by U. S. Circuit Judge Woods is important. The case concerned the sale of paregoric, which

has increased very rapidly since the passage of the Narcotic Law. If prescribed as a medicine paregoric is exempt under Section 6 of the Act, but if prescribed for the purpose of evading the intentions and provisions of the Act by supplying addicts with a preparation with which to satisfy their addiction "then the offense was complete" and the defendant "would be guilty."

In the administration of the law many emergency cases naturally arise. As an aid in deciding such cases the following suggestions, subject to modifications through further interpretation of the law by the courts, have been submitted by the commissioner of internal revenue:

1. *Use of Narcotics in the Treatment of Incurable Disease, Other than Addiction.*

With reference to persons suffering from *a proven incurable disease such as cancer, advanced tuberculosis* and other diseases well recognized as coming within this class, the reputable physician directly in charge of bona fide patients suffering from such diseases may, in the course of his professional practice, and strictly for legitimate medicinal purposes, prescribe narcotic drugs for the immediate needs of such patients, provided such patients are attended by the physician and that he regulates the dosage himself. The prescriptions in such cases should bear the endorsement of the attending physician to the effect that the drug is to be dispensed to his patient in the treatment of an incurable disease.

Such bona fide cases of incurable disease should not occasion difficulty in the proper administration of the law, and the fact that the patient suffering from such incurable disease is addicted to the use of narcotic drugs should not complicate the matter. In this class of cases, as well as in others hereinafter mentioned, caution should be exercised to avoid being imposed upon by unscrupulous persons, and too much credence should not be given to the unsupported statements of the addict himself, because the confirmed addict will go far beyond the truth in an attempt to secure an ample supply of narcotic drugs with which to satisfy his cravings.

The primary responsibility obviously rests upon the physician in charge of the case. The Bureau manifestly is not charged with the duty of laying down any fixed rule as to the furnishing of drugs or the frequency of the prescription in any particular case involving an incurable disease. The danger of supplying persons suffering from incurable diseases with a supply of narcotic must be borne in mind, because such patients may use the narcotics wrongfully, either by taking excessive quantities or disposing of a portion of the drugs in their possession or to other addicts or persons not lawfully entitled thereto.

2. *Aged and Infirm Addicts.*

Cases will come to your attention where aged and infirm addicts suffering from ***senility, or the infirmities attendant upon old age,*** and who are confirmed addicts of years' standing will, in the opinion of a reputable physician

in charge, require a *minimum amount of narcotics in order to sustain life.* In such cases prescriptions to meet the absolute needs of the patient may be written and filled without involving a criminal intent to violate the law. Even in these cases every reasonable precaution should be exercised to prevent the aged and infirm addict becoming the innocent means whereby unauthorized persons may engage in the illicit use and traffic in these habit-forming drugs. Prescriptions in this class of cases should bear the endorsement of a reputable physician to the effect that the patient is aged and infirm, giving age, and certifying that the drug is necessary to sustain life.

3. *The Ordinary Addict.*

One of the principal difficulties in administering this law will arise in the case of the ordinary addict who is neither aged nor infirm nor suffering from an incurable disease. *Mere addiction alone is not recognized as an incurable disease.* It is well established that the ordinary case of addiction yields to proper treatment, and that addicts can be taken off the drug and when otherwise physically restored and strengthened in will power will remain permanently cured. The average addict does not believe this and it is symptomatic with him to have a fear and distrust of any treatment or cure. Whenever the occasion presents itself, the hope of successful treatment should be instilled in the minds of the unfortunates addicted to this terrible habit.

Addicts who have been deprived of the drug their system craves suffer frequently most terribly. While in this condition they are likely to become public charges, since they are a menace to life and property. At the present time certain municipal and state authorities are endeavoring to handle addicts, but a project is being considered through which the U. S. Public Health Service will take over their care. Congress, however, has made no appropriation for the purpose as yet. In certain cities, namely New York, New Orleans and Memphis, public clinics have been established for drug addicts, and the suggestion is made to the collectors of internal revenue that they should support such undertakings in their respective districts.

The Bureau of Internal Revenue makes it distinctly understood that it does not approve the so-called reductive ambulatory treatment for the reason that when the addict controls the dosage he will not be cured; then, too, through deception he may secure a supply of drugs for peddling purposes.

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346 Washington St., Braintree, Mass., October 6, 1919.

H. H. HELBING, M.D., 4963 Fountain Ave., St. Louis, Mo.

Dear Doctor:

Your letter of Sept. 30, '19, just received. In fact it is the only communication from the National Society I have received for about two years.

Left the former address, 258 Mass. Ave., Arlington, Mass., in 1917. Served in the U. S. Army Medical Corps for 16 months. Had a world of

experience in g. u. diseases and syphilis, and later on in the great influenza epidemic. I endorse the "Eclectic Doctor's" stand in Texas, and voice the opinion that after personal contact with at least 3,000 cases of influenza in the service, that clinical symptoms are of paramount importance irrespective of what the strain of bacteria may be.

Would greatly appreciate as many back numbers of the "Quarterly" as you can possibly send me. Enclose check for $5. Feel that my having been in the service should make some difference in dues. However, let me know how I stand. Kindly make some mention of my communication in next Quarterly.

FRANK A. MACK, *M.D.*,
First Lieut. M. R. C., U. S. A.

BOOK REVIEWS.

Collected Papers of the Mayo Clinic, Rochester, Minnesota. Edited by Mrs. M. H. Millish. Volume 10, 1918. Philadelphia and London. W. B. Saunders Company.

It would seem superfluous to review this year book. The papers presented offer the latest on the subject considered.

Not being a surgeon, naturally those articles that were of paramount interest to me were those pertaining to my own line of work, for instance poliomyelitis, influenza, tonsilar infection, and recurrent vomiting. The treatment of empyema, the cutaneous aspects of tuberculosis, etc. Notwithstanding there is much relating to surgery in this volume, there is also considerable of diagnostic value.

The book has about 1200 pages and presents in a tangible, readily preserved and convenient form some of the advanced work of this clinic, and contains considerable matter that is valuable, readable and interesting.

BOOKS AND PAMPHLETS RECEIVED.

The Rockefeller Foundation Review for 1918. Public Health in Many Lands, Centers of Medical Education, War Relief and Welfare of American Troops. New York, 1919.

We have reviewed previous reports of this Foundation and to me, personally, the present one contains considerable matter of interest as well as entertainment.

The Rice Institute Pamphlet, Vol. 11, No. 3; also Vol. 14, No. 3.

The above contains lectures on the Principles of the Theory of Education, the System of the Sciences; the Making of the Right Kind of a Life, and The University and the Nation. These are published by the Rice Institute, of Houston, Texas.

OBITUARY.

Adcock, John Alfred B., Eclectic Medical Institute, Cincinnati, 1877, formerly Secretary of State Board of Health. Died at his home, August 20, 1919, aged 68.

Bailey, Nathan L, Keokuk Medical College, Iowa, 1892. Member of the South Dakota and National Eclectic Medical Associations. Died at his home in Lake Preston, S. D., August 5th, 1919.

Ballard, Edward Calvin, Eclectic Medical Institute, Cincinnati, 1871, at his home in Greenville, Ohio, October 1. Aged 70.

Brown, Theodore F., Indiana Eclectic Medical College, Indianapolis, 1886, at his home in Sandford Ind., September 1, aged 75.

Burnham, Norman G., Eclectic Medical Institute, Cincinnati, 1851, at his home in Denver, Colorado, July 19, aged 89.

Buxton, John L., Eclectic Medical Institute, Cincinnati, 1888, at his home in Bell City, Mo., July 25, aged 58.

Carey, Daniel Graham, Eclectic Medical College of Pennsylvania, Philadelphia, 1870, at his home in Elmira, N. Y., August 2, aged 79.

Crockett, Martin J, Eclectic Medical Institute, Cincinnati, 1870, at his home in Sylvester, Ga., May 2, Aged 72.

Dern, Andrew Jackson, Eclectic Medical Institute, Cincinnati, 1885. At his home in Redlands, Calif., September 2, aged 66.

Dickey, J. A., American Eclectic, St. Louis, Mo., 1889. At Bristol, Tenn., aged 69.

Freeman, Clara M., California Eclectic Medical College, Los Angeles, 1885. At San Francisco, July 12, aged 56.

Foster, Martin D., Eclectic Medical Institute, Cincinnati, 1882, for six terms Congressman from the Twenty-third Illinois District, died at his home in Olney, Ill., October 20, aged 58.

Hadley, Elmer Burton, Waterloo, Iowa, Eclectic Medical College of Indiana, Indianapolis, 1905, in Indianapolis, June 4, aged 49.

Hollingshead, Eli, Eclectic Medical Institute, Cincinnati, 1872. At the home of his daughter in Seattle, Wash., Sept. 11, aged 86.

Hayes, James, of Dayton, Ohio. Member of the Ohio and National Eclectic Medical Associations. At Evanston, Ill., Sept. 15th. Aged 82.

Hazen, John H, Eclectic Medical Institute, Cincinnati, 1881. Member of Pennsylvania and National Medical Associations. At his home in Titusville, Pa., Aug. 30th, 1919.

Helper, John C., Woodriver, Ill, Eclectic Medical Institute, Cincinnati, 1881. At the home of his daughter in Abilene, Kansas, September, aged 61.

Landers, Burrell Thomas, America Eclectic Medical College, St. Louis, 1890. At his home in Oklahoma City, Okla., Aug. 29, aged 75.

Louther, Snyder John Henry, American Medical College, St. Louis, 1893, member of the Pennsylvania and National Associations. At his home in Somerset, Pa., Sept. 24, aged 51.

Lewis, Eugene, Lincoln Medical College, Lincoln, Neb., 1896. At Modesto, Calif., June 2.

Mott, William Sunderland, Eclectic Medical Institute, Cincinnati, 1885. At his home in Salem, Oregon, Oct. 3, aged 64.

Price, J. T., Barston, Calif., July 9, 1919.

Rodermund, Matthew J., of Madison, Wis., Bennett Medical College, Chicago, 1887. Near Chippewa Falls, October 12, aged 65.

Rounseville, George L. B., of Mattoon, Ill., Bennett Medical College, Chicago, 1883, at Chicago, Ill., Aug. 15, aged 74.

Sager, Cyril Wickfield, of Titusville, Pa., American Eclectic Medical College, St. Louis, Mo., 1885, at Beaverdam, Pa., Aug 24, aged 57.

Schrock, William H. H., of Stoyestown, Pa., Eclectic Medical Institute, Cincinnati, 1908. Died in Johnstown Memorial Hospital, Aug. 11, aged 39.

Sprehn, Henry J. C., California Eclectic Medical College, Los Angeles, Cal., member of the California State and National Association, died at Oroville, Cal., October 13.

Stone, William O., Eclectic Medical Institute, Cincinnati, 1861. Died at his home near Bloomington, Ind., June 25th, aged 85.

Swett, George Davis, Eclectic Medical Institute, Cincinnati, 1897, member of the Ohio State and National Eclectic Medical Associations. Died at his home in Albany, Ohio, Sept. 14, aged 48.

Troppman, Charles Martin, California Eclectic Medical College, Los Angeles, 1897, at his home in San Francisco, Sept. 20, aged 56.

Williams, William Case, Eclectic Medical Institute, Cincinnati, 1873. At his home near Denver., Col., June 22, aged 71.

Work, lWiliam F., Eclectic Medical Instutite, Cincinnati, 1875. Died at his home in Charlestown, Ind., Oct. 7th, aged 69.

SECTION OFFICERS OF THE N. E. M. A.

Below is a tentative list of Section officers. We hope they will get busy and arrange a good program for our 1920 meeting:

Practice of Medicine.—Chairman, Dr. J. H. Goss, Jr., Decatur, Ala.; Vice Chairman, Dr. H. T. Webster, Oakland, Cal.; Secretary, Dr. C. H. Murphy, Lansing, Mich.

Surgery.—Chairman, Dr. E. B. Shewman, Cincinnati, Ohio; Vice Chairman, ...; Secretary, ... (To be filled by Dr. Shewman.)

Pharmacology, Materia Medica and Therapeutics.—Chairman, Dr. R. J. Lambert, St. Charles, Ill.; Vice Chairman, Dr. H. W. Felter, Cincinnati, Ohio; Secretary, Dr. M. M. Harvill, Nashville, Tenn.

Mental and Nervous Diseases.—Chairman, Dr. W. E. Postle, Columbus, O.; Vice Chairman, Dr. F. S. Peck, M.D., Oklahoma City, Okla.; Secretary, Dr. T. D. Adlerman, Brooklyn, N. Y.

Diseases of Women and Gynecology.—Chairman, Dr. Q. R. Hauss, Sellersburg, Ind.; Vice Chairman, Dr. Ethel Richardson, Quincy, Ill.; Secretary, Dr. J. E. Holman, Indianapolis, Ind.

Eye, Ear, Nose and Throat.—Chairman, Dr. Dan H. Griffith, Atlanta, Ga.; Vice Chairman, Dr. Z. L. Baldwin, Kalamazoo, Mich.; Secretary, Dr. J. P. Harbert, Bellefontaine, O.

Diseases of Children.—Chairman, Dr. C. A. Tindall, Shelbyville, Ind.; Vice Chairman, Dr. Nannie M. Glenn, State College, Penn.; Secretary, Dr. Frank P. Davis, Enid, Okla.

Hotels, Place of Meeting, and Entertainment.—Chairman, Dr. Samuel Green, Atlanta, Ga. Assistants to be chosen by Dr. Green.

Reprints of Dr. Beal's article appearing in the September Quarterly can be furnished for 2c a copy, including manilla wrapper.

RED CROSS NOTES.

Typhus Raging in Europe.

An epidemic of typhus is raging in Europe and the Red Cross is taking an active part in the effort to stamp out the disease.

Henry P. Davidson reports that 275,000 cases have been found in the belt extending from the Baltic to the Black Sea and there is appalling distress in Poland, Lithuania and the Balkans.

The Red Cross has sent 200 representatives to Poland in response to a pathetic appeal from Paderewski. Edicts circulated to stop the spread of the disease have been published in that country, one of them being an order that every person shave and bathe. About 100,000 cases have been reported and the death rate is high.

At the conference held in Cannes, recommendations were made to enlist Red Cross Societies to establish a permanent committee of medical experts of the allied countries to deal with the typhus problem.

Conditions Improved in Balkans.

Conditions have improved in the Balkan states, according to Lieut. Col. Henry W. Anderson, of Richmond, Va., who is directing the work of the Red Cross in Ioumania, Serbia, Greece, Montenegro, Abania and Bosnia-Hersegovina.

The improvement is due to the work of the Americans, who have contributed medicine, food and clothing among the starving and naked people. Upon the arrival of a Red Cross worker in a town of 300 persons only two well ones were found. Hospitals on the Danube were found to be without sheets, blankets, mattresses or drugs and the only food was musty beans.

These hospitals were cleaned and stored with the necessary equipment, clinics were opened, and kitchens were established.

Diseases in Montenegro.

Three hundred different ailments are mentioned in the detailed reports of the last month of the four Red Cross hospitals operated in Montenegro. Thousands of ragged, half-starved men, women and children line up daily before the dispensaries in Cettnje, Podgoritza and Niksik.

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Scabies is the most c ommon of all diseases. Eye infections are almost as prevalent, while malaria, rheumatism, tuberculosis, gastritis, mal-nutrition, bronchitis, worms, constipation, influenza and otitis media are equally common.

The American Red Cross clinics have treated cytitis, gun-shot wounds, diphtheria, liver derangements, goitre, neuralgia, neuritis, hernia, ascites, myositis, old scars, bursitis, pleurisy, fractures, typhus, paralysis, toothache, arterio-sclerosis, herbes, appendicitis, matitis, haemorrhoids, osteo-myelitis, ulcers, diseases of the throat, diarrhea, neurasthenia, cysts, eczema, scurvy, diseases of the kidney, meningovele, abscess, colds, mastoiditis, disease of the heart, hydrocele, polio-myelitis, measles, burns, Parkinson's disease, fistule, and varicose veins.

In addition to these common complaints scores of rare diseases have been treated.

Maternal Welfare Work in France to Continue.

Thh Maternal Welfare Work established in France, under the auspices of the Red Cross Children's Bureau, by Dr. F. L. Adair, Associate Professor of Obstetrics and Gynecology in the University of Minnesota, Minneapolis, is to continue. The plan of prenatal consultation established by Dr. Adair is to serve as a model in the School of Peuriculture of Child Welfare, which is to function under the American Red Cross Children's Bureau cooperating with the Medical College of Paris.

In September, 1918, Dr. Lucas, Director of the Children's Bureau, began an investigation of prenatal care in Paris. He requested that the work be organized systematically under a definite head, and Dr. Adair was given the commission.

In the few months, during which the work was established in two sections in Paris, the population of which numbers 600,000, about 500 prospective mothers were cared for in the consultations and also in their homes, which means that this number of families were approached in both a medical and social way.

In the hospital Social Service work, which was conducted for only two

months, the results were most gratifying and much was accomplished. Over 500 prospective mothers were interviewed and advised how best to meet their new problems of living. The response from the people was pathetic, showing how great had been their need of guidance.

The women were found by securing from the Mairie the list of those who had applied for an "allocation"; by establishing a liaison with the maternity hospitals of the neighborhood to secure names of women registered in their consultations who lived in the quarters where prenatal work was being conducted; by establishing friendly relations with the "sages femmes" of the neighborhood and by helping them to give their patients better care; by references from such other agencies as the Rockefeller Commission and Children's Welfare work and by one woman bringing another to the consultation. Through these agencies about 600 women came to the prenatal consultations during the first six months.

An organization was formed to carry on the medico-social work installed in the hospital and an attempt was made to form a society of social visitors who would be capable of teaching the mothers the proper methods of caring for themselves, of making preparations for the birth of the child and giving other information necessary for persons in their condition.

Medical Director Goes to Santa Domingo.

A medical director is being sent to Santa Domingo by the American Red Cross to take charge of a hospital there, and to make a study of the general health conditions on the island. An appropriation of $10,000 has been made by the American Red Cross to cover the expense.

Commander Hayden, U. S. N., who has been in charge of the hospital, reports that throughout the island disease is prevalent and hospital facilities are inadequate. There have been but three graduate nurses in the republic, although the training school has been opened.

The military government plans to establish a chain of free dispensaries. It is possible that the Red Cross will assist further in the future toward raising health standards.

Inter-Allied Typhus Commission in Poland.

The Inter-Allied Medical Mission sent by the International League of Red Cross Societies to study the typhus situation in Poland has begun its investigations in Warsaw. This is the first step in the activities of the league which was organized to coordinate all Red Cross activities.

The Mission has had inspection trips, conferences with the Ministers of Public Health, Army Medical Officers, the American Red Cross Commissioner, and with municipal health officers. It took a week's trip to the southwestern front to study conditions in military regions.

The commission is composed of Col. Hugh S. Cuming, Chairman, Assist-

ant Surgeon-General United States Public Health Service; Lieut. Col. Aldo Castellani, of the Royal Italian Navy Medical Service; Lieut. Col. George S. Buchanan, Medical Officer of Health of the Ministry of Health of Great Britain, and Lieut. Col. Visbecq of the French Army Medical Service.

Typhus Exterminated in Serbia.

The five-year campaign which American Red Cross doctors and nurses have been waging against typhus in Serbia has ended victoriously. The recent report of the Serbian Comission states that there are but sixty-five cases in the country, two-thirds of these being in Belgrade where the Red Cross operates a hospital for typhus cases only.

The first unit organized to fight typhus in Serbia was headed by Dr. Richard L. Strong, and arrived just five years ago. The invasion of the Austrians forced the unit to flee from the country. The subsequent famine and exposure endured by the Serbs served to increase the spread of typhus during the next two years.

During 1915, 150,000 persons died of the disease in a population of three million. One hundred and fifty doctors succumbed, so that after the Serbian army defeated the Austrians and work was taken up by the Red Cross there was only one doctor to every 75,000 persons. In towns of 4,000 population there was usually not one physician, although the number of typhus cases ranged from ten to thirty. There was one surgeon and one dentist in the whole country.

The free dispensary was the foundation of the campaign against typhus in Serbia. Dispensaries were established at the most advantageous points. Medical units working from these main points penetrated far into the interior of the country. Soup kitchens were established to fight malnutrition; farmers were assisted to return to their homes; housing conditions in cities were improved; hospitals were operated by the Red Cross and worthy institutions under other direction were furnished with needed supplies and equipment.

"It may seem strange," writes Lieut. Col. Edgar Erskine Hume, of Frankfort, Kentucky, present director of the American Red Cross Commission in Serbia, "but our doctors and nurses conquered the plague by using laundry soap, scrubbing brushes, kerosene, disinfectants, and delousing machines. We went into the homes of the people and carried the patient out. At times they were reluctant to leave, and we had a hard task overcoming their fatalism. We had to use force, for left to themselves they would have allowed the disease to run its course, which meant death not only to themselves, but to others."

Since typhus has been practically exterminated, the commission has turned its efforts toward instilling the principles of hygiene, sanitation and nutrition in the minds of the people. Appreciating the victory of the Red

Cross, prominent citizens are organizing to assist in keeping the country free from the plague, which there appears in its most malignant form.

The Surgery of Epilepsy.

Which cases of epilepsy should be referred to the brain surgeon? Grinker answers this question in the Illinois Medical Journal as follows:

"Only those cases should be considered proper subjects for surgery who have received prolonged treatment by means of good-sized doses of bromides, have followed the prescribed dietic and hygienic rules, and have received no benefit.

"Operation is contra-indicated in cases of repeated petit mal attacks, and also in the psychic forms of epilepsy.

"Obviously, the cases of traumatic Jacksonian epilepsy which were not benefited by the usual treatment should be operated on, for the probability of dementia is great, and the operative risk small.

"Cases of Jacksonian epilepsy, not of traumatic origin, but probably caused by cortical disease, such as tumor, cyst, or abscess, are proper subjects for operation. Even if the operation prove to have been only an exploratory one, it was worth while performing, for many lives have thereby been made more endurable. An operation to be of benefit should be undertaken before the epileptic habit has been thoroughly stablished.

"Cases of long standing, in whom there was already beginning dementia, have not infrequently benefited by operation.

"Positive indications for operation are: An increase in the number of attacks, as well as the development of paralysis and signs of beginning deterioration.

"Operation yields the best results during the periods of childhood and early adult life, for at these times the recuperative powers are greatest, while patients past middle age are not nearly as good risks and should therefore not be urged to undergo operation, except when the indications call loudly for interference." (The Homeopathic Recorder.)

New Applications for Membership.—September 10, 1919 to November 10, 1919:

Indiana.—Schenk, G. H., Ridgeville.

Connecticut.—Alban, Emil J.; Koegan, Jos. F., Bridgeport; Deery, J. P., Bridgeport.

New Jersey.—Faciollo, F., Bayonne.

Eclectic Members of State Medical Boards.

*Arizona	W. H. Sargeant, Phoenix (Bennett '05).
*Arkansas	J. E. Stevenson, Little Rock.
(Separate Board)	J. K. Jackson, Little Rock.
	Samuel Boyce, Little Rock.
	C. H. Parks, Little Rock.
	C. E. Sparks, Altheimer.
	A. C. Prichard, oHt Springs.
	S. C. Norris, Tuckerson.
California	H. V. Brown, 643 Euclid, Los Angeles Calif. '02).
Connecticut	John W. Fyfe, Saugatuck.
	E. A. Markham, Durham.
	E. H. Marsh, Mansfield Centre.
	Jas. E. Mair, Bridgeport.
*Dist. of Columbia	L. D. Walter, 1334 G St., N. E., Washington, D. C.
Florida	E. A. Aurin, Ft. Ogden.
Georgia	A. F. White, Flovilla.
	O. B. Walker, Bowman.
	A. F. Fleming, Waycross.
Idaho	J. J. Herrington, Moscow (E. M. C. '93).
Indiana	M. S. Canfield, Frankfort (E. M. C. '73).
Iowa	Geo. F. Severs, Centreville (E. M. C. '89).
Kansas	A. S. Ross, Sabetha (Lincoln '96).
	G. R. Dean, McPherson (Amer. St. L. '92).
Kentucky	Geo. T. Fuller, Mayfield (E. M. C. '89).
Massachusetts	A. L. Chase, Randolph (E. M. C. '72).
*Michigan	Nelson McLaughlin, Lake Odessa (E. M. C. '07).
	A. L. Robinson, Allegan (Bennett '02).
Missouri	T. A. Son, Bonne Terre (Amer. St. L. '99).
*Nebraska	Hall H. Humphrey, Daykin (Cotner '13).
*Nevada	S. L. Lee, Secy., Carson City (Phys. Med. Cinti. '70).
New Jersey	D. P. Borden, Paterson (N. Y. Ecl. '72).
New York	Earl H. King, Saratoga Springs (N. Y. Ecl. '98).
Ohio	S. M. Sherman, Columbus (E. M. C. '75).
	J. K. Scudder, Cincinnati (E. M. C. '88).
Oklahoma	W. T. Ray, Gould (E. M. C. '92).
Oregon	U. C. Coe, Pres., 1208 Stevens Bldg., Portland (E. M. C. '04).
Pennsylvania	C. L. Johnstonbaugh, Bethlehem (E. M. C. '87).
Tennessee	B. L. Simmons, 309 Jackson Bldg., Nashville (Ga. '90).
Texas	M. F. Bettencourt, Mart (E. M. C. '06).
Utah	C. L. Olsen, 932 S. 5th St., East,, Salt Lake City (E. M. C. '98).
Vermont	P. L. Templeton, Montpelier (U. S. N. Y. Ecl. '82).
	A. E. Parlin, Island Pond.
*Wisconsin	F. C. Haney, Watertown (Bennett '07).
	R. C. Rodecker, oHlcomb (Bennett '98).

*Not members of the National Eclectic Medical Association.

READING NOTICES

ANTI-FLU PREPAREDNESS.—The investigations of municipal and state health and welfare organizations throughout the country during the past few months have demonstrated beyond doubt that there are a great many cases of post-flu maladies still prevalent and the toxic conditions developed from the previous attacks of influenza have materially reduced the resistive force of a vast number of individuals. This means that these former victims of the disease will be especially susceptible to attack should there be a recurrence of the epidemic, and as there is a general belief among the medical profession and health officials that the disease will reappear in some form or other the coming winter, all necessary preparedness plans should be formulated to meet the needs of the situation. Reliable remedies, such as will rid the system of existing toxic conditions, should be prescribed for the former flu-victims, so that tonic medication will build up a formidable resistive force to fortify these persons against recurrent attacks. Echtisia, (Merrell), an echinacea compound, is an excellent remedy to prepart the way for tonic preparations and this company also produces a highly effective tonic to follow the neutralization of the toxins, known as Syrup Albuminate of Iron. When there is an attack of influenza, either with or without pneumonia, Proteogen No. 12 has been found of dependable value. In the clinical experiments made with this combination of plant proteins, last winter, the results were exceptionally effective, and its prophylactic influences were also highly recommended. It is one of the few preparations which seemingly possessed the capabilities to overcome the bacterial infection and build up the vitality to the point of highest resistance. There is already a strong demand for this Proteogen, probably in anticipation of recurrent attacks or a revival of the flu epidemic, and the indications all point to its very extensive use should the disease again make its appearance. It will be worth while for the physician to keep these dependable remedies in mind as a means of preparedness.

"PHEUMONIA PREVENTION AND TREATMENT.—is the title of a very concise brochure issued by the Mulford Laboratories. It deals particularly with the production and testing of Antipneumococcic Serum, Pneumo-Strep-Serum and Pneumonia Serobacterin Mixed. Special attention is given to analysis and illustration of the apparatus for intravenous injection, which simplifies the administration to such an extent that an intravenous injection may be safely given without any previous experience. A postal card will obtain this very valuable addition to pneumonia literature, which ought to be on the desk of every physician.

"I prescribe Tongaline very frequently as a remedy for excess of uric acid which is often the cause of rheumatism, and it is my sheet anchor for that condition. I also find Tongaline very beneficial in muscular pains due to a sluggish liver and inactive bowels. When a patient comes to me complaining of soreness all over, I place him upon Tongaline, and it has never disappointed me."

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ECLECTICISM—WHAT IT STANDS FOR.*

W. E. Jurdan, M.D., Eau Claire, Wis.

"Eclectic" is a word containing a world of meaning; like sentences from Carlisle or Emerson, you can unwind it as you would a ball of yarn and it becomes a legion—history, philosophy, science, progress; it breaks the fetters and sets the minds of men free; the soul becomes conscious of its "Ego," stands on its own initiative; democracy is born; thought leaps out with possibilities of unlimited advancement; chained to no dogma, the Universe is his, individuality, responsibility, truth.

The history of the birth and progress of Eclecticism covers the battle ground and struggle for light and truth through the centuries. Its early votaries were Demosthenes, Justinian, Plato, the elder Pliny; the defamed and martyrd names are Socrates, Galileo, Girolama, Bruno, Spinoza; among its knighted heroes are Voltaire, Darwin, Martineau; its first great victory was the "Magna Charta Act" in England; its first tremendous upheaval was the French Revolution; its greatest triumph was the birth of democracy in America. Here the human brain was first unshackled, a flood of light came in, men began to push back iron dogmas, superstitions, and the long established authority of ignorant pomp and caste.

Thomas Paine, an Englishman, brought to these shores the first fire brand Eclectic pamphlet, "Political Common Sense." Under its influence, dogmas that had enslaved the thoughts of men toppled and fell, the demon of state protected ignorance staggered with his mortal wound. Washington, Adams, Monroe, Jefferson; the early influence that controlled Harvard College set up and established a department, known as the Harvard University Divinity School; a nonsectarian branch of Eclectic research, sifting with its "Higher Criticism" history, science, tradition, fable; Eclecting truth like shining gold from the sands of time.

Harvey, Blackstone, Bacon, Huxley, Spencer made their advent in England. A few rays of light shown out from the dull plodding fogbanks of Germany. "Kant's Critique of the Pure Reason," "Hegel's Ethics," a profound treatise on the science of thought; "Schwegler's Philosophy;" but these lights went out, stifled by the Bismarck blood thirst, cry and smoke

* President of the Wisconsin State Eclectic Medical and Surgical Society. Delivered in Milwaukee June 4, 1919, during the forty-third annual session.

of the Franco-Prussian War. In France, as she awoke to science and literature, arose the great Pasteur, Trousseau, Victor Hugo, Renan; and here in America, Channing and Theodore Parker in Boston, the city of books, attacked the scholastic sophistry, puritanic creeds and narrow, intolerant notions of the time. Eclectic reform penetrated to every department of enlightened thought, and shook all the pillars of established superstition.

Our fathers in the department of medicine began to question the set formulas and false theories of the Old School, and little by little, step by step, we have fought our way against tremendous odds, but truth, like a two-edged sword, is immutable, eternal and invincible.

We are the Puritans who landed on Plymouth Rock; we are the "tea party" of Boston Harbor; we are the fathers of the revolution; we are they who signed the Declaration of Independence.

We are battling against error, Eclecting, fighting for the truth, snatching from out the darkness shining gems, making straight the road, with path emblazoned by the sunlight of God's immutable laws.

Our mission is noble, the goal we aspire to reach is lofty and high, our ideals are Utopian, yet possible of attainment in the unending, slow advancing future.

Untold ages lie behind us in the birth, history and progress of life on our globe, lifting man by slow transitions to his present condition. So in the horoscope of future advances, time is without meaning.

The word time has no meaning when written on the slow stepping-stones of human destiny.

We believe that in the attainments and progress of time, science will yet conquer and subdue suffering, sickness and disease; will banish it from the human family in all its hideous, monstrous forms. History of the past and present is a prophecy of the future. Already science is making the initial steps in its general trend to seek and remove the cause. Yes, modern science is taking lessons and beginning to promulgate the doctrine patterned after Him who would "Take away the sins of the world."

We know that the laws of health are immutable and to the transgressor there is no forgiveness. We would follow in the path of Him, "who came to save his people from their sins." We would stop the thief from stealing, the false from telling lies; we would reform the drunkard, lift from the ditch the fallen. We would remove from the human family vice and crime. We would implant positive virtues of cleanliness, chastity, brotherhood and love; a present heaven on earth of Christ's Kingdom "within you." We would make the human family ideals of health and happiness.

We are fighting the pestilence of disease, deformity and premature death in every form, and we are striking at the root, knowing that these earthly fires of hell are inseparable from vice and sin and that there is no escape from the consequences of Nature's transgressed laws.

We are seeking to remove the cause of suffering. We are teaching dietetics and hygiene. We are striking at every foul contagion and infection.

We are going to cleanse the alleys and purify the by-ways. We are going to make clean every festering, putrid spot. We are going to wipe out flies, fleas and carriers of contagion. Eclectics of the future will wall the rivers, macadamize the streets, terrace the mountains, and beautify every nook and corner; make our little world a millennial home to live in.

Whole streets and dens of iniquity will be rooted out. The blear-eyed defamer of woman, the painted harlot. In time we will stop the propaganda and hereditary influence of all that is vile. We will quarantine and finally root out the carriers of idiocy, insanity, deformity, pestilence and death. We will make monogamy absolute and complete; love and irrevocable law will bind the one man to the one woman and clustering around the home will be a limited family of bright, healthy children.

Races to come will bask in and breathe the sun's clarified air, drinking waters fresh from Nature's undefiled fountains, and feast on foods sweet and pure.

Law will regulate heredity—eclect and fix the standard of the human type unborn. We will teach the science of prenatal influences. *We will destroy the sexuality of all that is hideous, vile and bad.* Crime, deformity, insanity and disease will not be allowed to propagate and foul the millennial age towards which we are drifting with the poison of their physical, mental or spiritual contaminations.

"The survival of the fittest." Eclective, selection of the better, best and higher types, will come as a natural sequence and be enforced. Science and law will classify and determine the blood, sinew, brain and heart of a future brotherhood of humanity to inhabit the earth. "Men will beat their swords into plow-shares, their spears into pruning hooks, nation shall not rise up against nation, neither shall they learn war any more."

Coming races will become conversant with the laws of parentage and birth control. Eclecting, selecting and raising to higher standards, evolving step by step higher and more perfect human types.

Limiting the inhabitants of earth, limiting the population of our globe —not by pestilence, nor by starvation, nor by mad fury of massacre or diabolical savage wars; nor by indiscriminate destruction of babies, as in China, but by selectice, Eclective methods.

The survival of the fittest, guided by the new flood tide of a higher intelligence, a broader brotherhood, a deeper sympathy and a purer love.

In the meantime the soul of enlightment which has emanated from the English language, embellished with its Shakespeare, its Milton, its Byron, its Pope, Tennyson, Scott, Goldsmith; our own Longfellow, Whittier, Lowell, Saxe, Bryant; will continue to carry advanced thought, bringing under its control all nations and all tongues; flooding with its light, hills and valleys; pouring its benign influence into the darkest recessess of our globe.

A time will come when the songs and sayings of sages and prophets will come true. "Righteousness will cover the earth as the waters cover

the sea"—"the leaves of the trees shall heal the nations and the child shall die a hundred years old."

The axe is laid at the root of the tree, of deformity, sickness and disease; the weeding process has begun. Science will yet root out the serpent of suffering in every form; "Though the sins of earth be as red as scarlet they shall be made white as snow."

The world now carrying its load of sorrow, sickness and suffering is learning that "the way of the transgressor is hard." Eclectics will herald the precepts of that great hygienic Philosopher, The Reformer of Men, whose teachings will grow clearer and clearer until, "It taketh away the sins of the world."

The standard of mankind will be reached in physical, mental and moral perfection, "A sound mind in a sound body."

The light of Eclectic philosophy, the light of Eclectic science, Eclectic hygiene, Eclectic medicine, Eclectic morality, Eclectic religion will grow clearer and clearer, like "the path of that Good Man, shining brighter and brighter unto the Perfect Day."

Like Comte and the positive philosopher of France, we are tied to no dogma; we accept no theory; we demand proof. We are out for humanity, peering, hunting, searching for truth, the gilt edged lightning of truth.

There stands the Eclectic banner; there sit her critics of truth and error, no counterfeit shall pass her gates. In the healing art every item, every alkaloid, every resinoid, every oil and extract, every chemical, simple or complex, every vaccine or serum, every vicious poison, every kindly virtue in plant or flower shall be tested and tried in fire, proven at the bedside, confirmed by the consent of multitudes of Eclectic doctors.

We are leaders in discovery, we have sought out and verified specific medicinal virtues from the vegetable kingdom.

We have assimilated knowledge also from other schools, Eclecting from all colleges, all libraries, all climes and all times. From whatever source obtained, we base our action on the rock of truth. All truth is ours, and it is the truth that makes us free.

We are conscious that principles so broad do not excite the clamor and popular plaudits of an ignorant world.

We are proud that we are in the minority, that we make our appeal to the higher cultured, to the intellectual, to the scholarship, to the reasoning, just and impartial world.

We are not playing to the crowd. We are proud that the superstitious and ignorant do not come and worship at our shrine.

We do not make a play and fad of unnecessary and harmful surgery; we do not spring appendicitis and other operations on all occasions like our brethren in the more popular school; but for just and honorable surgery, supreme above the fake methods of other schools, our Eclectic surgeons stand for skill and success foremost in the world.

It is not, however, in surgery alone that we excel. We were the first

botanists. We do not seek to evade our old name *herbalists* applied to us in the healing art.

Thomson, an early father of our school, losing a patient in typhoid fever was tried for murder. He refused to bleed and salivate with mercury and relied exclusively on the medicinal virtues of roots, barks, herbs and flowers.

Our fathers in vigil watch at beds of sickness, as disappointment and failure resulted from old methods, yes, our mothers and our grandmothers were with them, they went out into the fields among shrubs and flowers, bringing to beds of suffering, in days of anxious nursing and nights of vigil care; they imbibed knowledge, learned little by little, the therapeutic action and virtue of Nature's healing balms in the vegetable kingdom; making at last nature speak a language audible to science, revealing to man her hidden secrets. For a time our Podophyllin, Leptandrin, etc., were laughed at by our allopathic brothers, but when they saw the magic of our remedies they began to appropriate our discoveries.

We have infused into their system all there is that is living and true. They have pillaged our pharmacopeias, stolen the brains of our great Eclectics, and ascending the old fortress of hypocrisy and deceit, of egotism and pomp, wage against us unfair and relentless war. We have fought them from boyhood up to manhood; we have suffered many reverses, many defeats. They have waylaid, persecuted and killed a number of our colleges; they have struck down many of our great men, great authors, great Eclectic doctors. We have many martyrs among the fathers of Eclectic medicine.

We do not believe like our allopathic brethren, that a certain curriculum of attendence in a college will make a successful doctor. They have reduced their system to a certain set of formulas, simple and easy to follow, so that the regular allopathic doctor is not holden by individual responsibility, he does not stand on his own judgment, and in many states is not amenable to his conscience and is exempted from the jeopardy of the law. His duty is merely to administer the set remedy, perform the set operation, walk out of the sick room; it does not concern him whether his patient lives or dies. Easy to be a good allopathic doctor.

We Eclectics, however, believe in individual responsibility; in individual capacity; the individual ability of men and fitness for their vocations. We believe that men are adapted by heredity and by environments, designed by nature for successful occupations. I do not mean that natural capacity alone can make a successful doctor, but I do mean that if nature has refused native capacity all the colleges on earth will not remedy the defect.

On the other hand, however great the natural gifts, however wonderful the native ability, no person can become a successful doctor without years, and still years of hard study; long and continued experience; these are the essentials to a successful doctor.

I place no stock in narrow superficial education. I would lay for Eclectic doctors a broad, deep base on which to build.

Every applicant to an Eclectic medical college should be able to pass the curriculm of a high school, and such a university course as is especially devoted to the study of those topics which underlie all existence—an Eclective, select university education.

He should not waste time as I did in a long study of Latin, Greek, Hebrew or other dead languages, there being so much else of more practical importance. He should, however, acquire a thorough knowledge of the science of Astronomy, Geology, Archeology, Paleontology. He should be an expert in Chemistry, Botany, Zoology, Anatomy and especially Comparative Anatomy. He should be thoroughly read and familiar with that branch of science, so little understood, Embryology, not only in the human, but in the entire realm of zoologic and geologic life. He should have a thorough knowledge of the inception and development of life in all of its countless forms, from the lowest protoplasm and the ascending metamorphosis and evolutions of all animal life, up to and through the wonderful changes of the human embryo, and final transformation to the human fetus.

It was my happy lot to have been a student of that greatest of the world's naturalists and scientists, the great Agassiz of Harvard College.

I have heard him summing up the record of his life in his discoveries pertaining to embryology, making this singly and alone, his one great achievement.

Let me try to condense a little of the meat and gist of this great master.

The human embryo repeats in miniature, in its upward evolutions and changes the whole history of life on our globe. Far back in the eternities, life in protoplastic, initial cells made its advent, and through the geologic ages, struggled slowly upward, reaching finally the human climax.

We have all gone through all the changes, all the evolutions, in our embryonic developments, that zoologic forms of life travelled in its upward advance through the long geologic ages. To understand and know the history of the human embryo, the changes, metamorphosis and evolutions we each have undergone, from inception till birth, is to know the history of the geologic and zoologic changes all life underwent from its first low and simple forms in the palaeozoic seas, upward through and in the order of mollusca, fishes, fowls, reptiles, mammals and finally man.

To know the history of life on our globe is to know the metamorphic evolutions we made within our mother's womb; wonderful, rapid changes, during the thirteen days of our embryonic history, developing finally into a human fetus; at first with contour, and head in shape, much like the ape's, baboon's, or gorilla's; and after birth, still changes of the head and form through babyhood, boyhood into manhood, showing the origin, ages ago; and slow upward advance of the human race.

The history of life on our globe from its inception, through all its upward changes, and the embryonic history of our own lives are the same; corresponding one with the other. Protoplasm, then a simple cell, then a multiple of cells, then a sack, next a division of the sack into stomach and

heart, and the heart at first, in the human embryo, as in mollusca, a single chamber; next as in fishes, two chambers in the heart, afterwards as in reptiles three chambers in the heart, and last as in mammals and man four chambers in the heart.

To know embryology is not only to know the history of life on our globe, but to know the history and manner of the formation and development of every separate organ; how the eye was evolved, nature's ages of experimentation, its first beginning, crude structure, many changes, ending at last in a true picture forming eye. How during long geologic ages nature finally formed the ear. And it is a study of most intense interest, tracing through the ages each step of the formation of the bony structure, the blood circulation, the nervous system.

(On this and kindred subjects I have written a book, which for want of a better title I have named "Way Marks of Two Eternities.")

Science in its demonstration of the reality of things must stop with the syllogism of Descartes, that great French logician, *"Cogito, ergo sum,"* I think, therefore thought is. Beyond this science cannot go; we think a universe, therefore a universe is.

The universe is a thought, our thought, its own thought, God's thought.

A dewdrop glistening in the sunlight, measured by geometry and space for thought, is as deep and wide, as vast and boundless as the circle enclosing all the stars. In your thought bring down the solar system and our world teeming with its human flood, retaining all its intricate perfection, until it hangs suspended in the central depths of the dewdrop, outer immensity still decked with heretofore unseen shining stars. Develop a seed till the growing tree covers acres with its shadow; unfold atoms into a milky way of suns, teeming with thought and life; cogitate on this thought creation of God; we are a trance, dream, a thought emanation.

We are not merely physical beings, we are more than physical, soul embryos, thought embryos, dreaming this dream of life; *eternal spirits* hidden in a mirage of nature, this fleshy coil.

Death in life and life in death, no annihilation, *"the word."* Thought is the creator and thought the only reality.

Thought is climbing upward through perpetual metamorphosis, transmutations, transmigrations, evolutions to higher, wider, more complex activities.

This is the vestibule, the dim dawn, the twilight of our days; embryos we must be till this earthly vesture falls away and to sense becomes a vanquished shadow; invisible, indestructible, immaterial apparition, from this narrow cell let free; thought embryos of God, to put on garments of higher celestial; sunshine of new creations; landscapes with slopes and flowers; a new "Mazzaroth in his season"; a new "Arcturus with his sons." Dramas enacted in the past forgotten, new and greater dramas in the eternities.

Cocoons, caterpillars of thought, embryos we are on the rungs of the

tree of knowledge, climbing upward to the tree of life; "after the image," "in the likeness" of the infinite, omniscient, eternal thought.

"Dim miniature of greatness absolute, a worm, a God; I tremble at myself and in myself am lost; O, how reason reels, what a miracle to man is man."

Every applicant to a medical college should be familar with such great teachers as Darwin, Huxley, Owen, Dana, Gould, Gall, Spurzheim, Hugh Miller, Denton. Before commencing the study of medicine, he should be familar with metamorphology in all its departments, comparative anatomy of all forms of life, comparative physiology, in both the vegetable and animal kingdoms. He should be conversant with the microscopic world, and the close relations of chemical and living activities, the evolutions and transitions of chemical and natural forces to living phenomena.

The fundamental, chemical and other changes we call death, and in death life; life and death; their intricate relation, that life is death and death is life; the wonderful paradoxes they teach. We could not live unless we died. Life, death, resurrection, transmigration are synonyms. We are in a universe of eternal, immutable and infinite changes.

There is *no destruction, no annihilation,* all activity is life, change is life, death is life. Our life, our activities, every emotion of man cost him physical loss; our muscle, bone, brain, blood is continually dying, and as constantly renewed. This stream of white and red corpuscles, each a perfect world of life, as perfect as we, perish in a steady stream, supplying by their death our thoughts, our feelings and our activities. The thoughts we are thinking and the emotions we are feeling leap out of this grave we call a brain.

"Life evermore springs from death in earth, sea and sky,
And even for the rose to bloom something must die."

To the chemist, life, death, resurrection are synonyms.

We have been, will always be. Changes are eternal and change is life—and this leads us to the portals where science and philosophy stop, and theology weaves its arguments; pertaining to things "eye hath not seen, nor ear heard, nor hath it entered into the heart of man to conceive."

We are dealing in this essay with this present dream of life, this physical universe, which appears to be, which the eye sees, the ear hears, the touch feels. We are not now entering the domain of idealistic, creative thought, to perchance the souls unfolding into new and undreamed of life, in the infinitude of God's creation.

Prophets, poets and sages tell us of other, higher, purer and happier realms of life, in the eternal round of new being. Embryos we are, embryos we must be, till we burst the shell and spring to life, "the life of Gods, a transport and of men."

A broad knowledge and philosophical conception of the universe should precede all medical study. To know and understand the history of *one atom* is to know and understand the history of *all atoms.* To know the history of

an atom, is to know the history of a world. An atom in immensity is immensity itself in its revelations of truth. To know the history of our life is to know the history of all life, all worlds, all suns, all expanse.

We are finite. We look out into the infinite; above us this universe of stars; here we are related to the worm and our mother earth; we are dust in the sunbeam. "Insect infinite." "In God we live, move and have our being." "In my father's house are many mansions." Nature's eternal round of changes. "I and my father are one." "Before Abraham was, I am." "My kingdom is within you." "Ye hath eternal life."

But I am digressing. The applicant to an Eclectic medical college should have a general knowledge of the arts and sciences. This mechanism of the human structure, and this mechanism of the human life embrace all known mechanics.

The applicant to a medical college should first be something of a "Jack of all trades." He should have an exact mechanical eye, quick in judgment of forms, weights, measurements, colors. He should be a master of physical, manual training, until the eye becomes exact, the hand steady, logic and analysis quick.

On such a foundation it is easy to build the Eclectic doctor. Surgery, pathology, obstetrics, pharmacy, theory and practice are quickly understood and attained.

All our great Eclectic surgeons, physicians, chemists, authors base their success to having builded on a similar foundation.

And last, what should be the incentive, the inspiring and impelling motive to his work; if to acquire wealth or fame, he should look to some other field, and not unless he is confident he possesses the fibre and capacity, and is willing to consecrate his life to this work, regardless of plaudits, emoluments, or financial rewards. He must go out a soldier of strife and warfare, and fight, if necessary, all the devils of hell; sedate, unruffled, calm; his heart overflowing with charity, imbued with meekness, sympathy, kindness, "taking no thought of what he shall eat, or what he shall drink, or wherewithal he shall be clothed."

Unless such a one is thus nerved and capacitated, and is willing to push behind him temptations to worship Mammon; unless he is thus willing and impelled to throw his whole being, heart and soul into the vortex, to place his all on the altar, the altar of a common brotherhood, the altar of sympathy and love, he has no business to aspire to become an Eclectic doctor.

Brothers, let us continue the work; let us dignify our high-priesthood.

We are here in life with a mission—commissioned—and all along, amid and through the surging storm we can be happy. It is our business to be happy, to make others happy. Not alone to allay the fever, to cool the parched tongue, to alleviate physical distress, but to cheer with the psychology of our smiles.

Let us be sympathetic, just, honorable, true.

In the meantime we should not forget business methods in securing

just recompense for our services. "The servant is worthy of his hire." It is our right to keep a sharp look-out for fees and prompt collections; by such means alone can we hope to command and hold respect; and while we carry, if we must, a corpse up Sinai hill, we can still be happy in the assurance, as we look forward with solicitude for our future, and the future of our families. We can lean on, rely implictly on the saying as it is written:

"I have never seen the righteous forsaken, nor his seed begging bread."

We have shown that the whole order of the universe is perpetual activity, evolution, progress.

Out of cosmos has come the creation; out of the homogeneous is born the heterogeneous; the simple becomes the complex. Nature, forever experimenting, takes on new forms, selects and improves, discards the old, eclects, perpetuates the new.

Creations of today cover up those of yesterday from which they are born, leaving in debris slight traces, scattered fossils, waymarks through the eternities of the imperfect, buried past.

Nature, forever eclecting, protects each step of advance, is climbing continuously to higher, more complicated forms.

We have shown that *Eclectic* is written in the origin, progress and development of the human race, both as regards his individual embryonic history and his beginning and upward advance through the geologic ages.

Eclectic is written on all nature, in its every department, choosing, progressing, advancing.

Eclectic is written back in the eternities, when "darkness covered the deep"; written on the "formless void" in the solitude of a cosmic sun, when he sat brooding on the vast abyss and gave dim, first life to solar worlds.

Eclectic is written in all the aeons of creation, building, changing and perfecting the scenic panorama of things, human existence, life and death.

Eclectic is written on the activities of materiality and all mentality, in a ceaseless struggle towards higher perfection.

Eclectic is written in the consciousness of light; in the origin and history of all suns, all worlds, all thought and all life.

Eclectic is written on the dome of all the stars, in all our knowledge and theories of creation.

Eclectic is written in fundamental law, in the eternal "word" before the sun, prior to a "Paradise Lost"; in the life and happiness we had in "oneness" with the Father before the world was.

Eclectic is emblazoned in letters of very fire, enveloping the throne of God, saying to the universe, in its perpetual mutations, activities and changes, *"Advance, advance, advance,"* calling out to man in all his history and in his individual struggles, *"Climb up higher, higher, higher."*

Eclectic has been the whole order of the past, it will be the order of the future.

Brothers, let us keep right on, our watchword *"Forward, forward, forward"* in medicine, surgery, art, science, morality, religion. *Eclecting, eclecting, eclecting,* till we hear the summons, "Well done, good and faithful servant." *Climbing, climbing, climbing.*

For there is a ladder on the earth and the top of it reaches to heaven.

COUGH—ITS CAUSE, SIGNIFICANCE IN DIAGNOSIS, PROGNOSIS AND TREATMENT.

N. A. Graves, M.D., Chicago, Ill.

Coughing is a reflex act. The mechanism of cough is, first, a deep inspiration, the closing of the glottis, and its quick and forcible opening by the sudden pressure of air forced from the lungs by the action of the thoracic and abdominal muscles.

Cough does not of itself constitute a disease—it is, however, a symptom of so many diseases that it demands a careful study. The most frequent causes of cough are located in the respiratory tract. Irritation of the pharynx, larynx or bronchial tubes from cold or hot air, tobacco smoke, acid fumes, particles of metal or dust, acting as foreign bodies, give rise to cough. Irritation from inflammation of the mucous membrane of the respiratory tract causes cough. Nasal spurs, elongated uvula, enlarged tonsils, or enlarged lingual glands frequently cause a cough. Outside the respiratory tract cough may be caused from pleural inflammation, irritation of the heart, heart disease, disease of the ear, or a foreign body in the ear, an irritant tooth, disease of the uterus or pregnancy, disease of the stomach or liver. The cough associated with disease of the heart is secondarily due to the lung congestion, and that of the stomach or liver due to the accompanying pharyngitis or pleural irritation, but these must none the less be considered primal causes. Cough may be due to pressure effects from the heart or liver, an aneurysm, caries of the dorsal vertebrae, abscess or enlarged bronchial or peribronchial glands. Cough may be caused by sudden chilling of the body surface. Aspiration of the pleural cavity often causes cough.

As to centric cough, Kohts found that irritation of the floor of the fourth ventricle above the center of respiration causes cough, and the cough of hysteria or hydrophobia may thus be accounted for.

Probably the first noticeable thing about cough is its *sound.* We learn to recognize the peculiar sound of cough associated with various disease conditions. We characterize laryngeal coughs as croupy, hoarse, brassy or metallic. Heard once they are never forgotten. Such coughs may be from spasmodic croup, diphtheritic croup or a simple or tubercular laryngitis. The coughs have a similar yet different sound, and to the trained ear are significant, the cough of a tubercular laryngitis, for example, being

husky and ineffectual; that of diphtheria being dry, harsh and often whistling.

The Bronchial Coughs.—Here we recognize the loud, harsh cough of bronchitis. The catching, painful cough of pleurisy and pneumonia, the hacking, hollow cough of phthisis, the spasmodic, suffocating cough of asthma, the loud, harsh, rapid cough with the inspiratory whoop of pertussis, the bark of hysteria and the somewhat short, metallic cough of pressure from aneurysm. Next one notices the *frequency* of the cough, whether constant, paroxysmal, or infrequent. Whether change of position increases or decreases the frequency or modifies the cough. Bronchiectasis can frequently be diagnosed by noting the infrequency of the cough, and the necessity of coughing when the patient lies down. Phthisical cavities are also determined, partly at least, in this way. Incipient lung tuberculosis is often associated with a light, constant cough, occasionally causing vomiting. A persistent cough which can not be accounted for by some clear cause should be considered tubercular. One will occasionally be mistaken, but fewer errors will be made if you consider them all tubercular, unless they can be proven due to some other cause.

The more I see of the so-called chronic bronchial diseases, the more I am convinced that 90 per cent. are tubercular—that some old, latent tubercular focus exists somewhere in the lungs.

Third, the *duration* of the cough is noted. The short cough of hysteria, heart disease, or pleurisy is markedly different from the prolonged cough of bronchitis, when the patient may cough for several minutes and be rewarded finally by getting up much or little mucus, or in the prolonged, difficult asthmatic cough, by raising a mucus plug. The duration of cough in pertussis is characteristic, with or without the whoop.

The fourth point noticed is the *result* of cough, first, whether the cough is productive of sputum, which may be mucus, pus, blood; or, second, whether it be without sputum. The first is the moist or loose cough, the second the dry cough. Dry coughs occur in pleurisy, in disease of the larynx, diseases of the nose and throat, sometimes in pertussis and in most extra-respiratory conditions. They usually occur in the first stages of bronchitis, pneumonia, phthisis, influenza, asthma and a few other diseases. Moist or loose coughs occur in the later, rarely in the early, periods of bronchitis, pneumonia, pertussis, phthisis, asthma, influenza, and some other diseases. The longer the duration of these diseases the more profuse the sputum, usually. To the patient the second class of cases constitute what I shall call useless coughs. Coughs which are unproductive, which use up energy, cause hypertension of the blood vessels and leave the patient exhausted to a greater or less degree. The first class embrace for the patient the useful cough, the productive cough; the cough of bronchitis, pneumonia, bronchiectasis, phthisis and occasionally asthma are examples. Cough is of value to the physician not only in the diagnosis of the disease, but it is of value in prognosis and treatment. Given a

patient with a useful cough in acute pneumonia—if such cough is productive and fairly strong it is an important element in a favorable prognosis. If, however, such cough stops or is stopped by medication the patient rarely recovers. In the later stages of lung tuberculosis this fact is no less true. Unless cough and expectoration can be restored the outlook is unfavorable in every case. In twenty years I have yet to see a case of acute lobar pneumonia recover when the secretion was fair and the cough moderate in severity and have them suddenly stop.

On the other hand, the persistent productive cough aids always in determining a favorable outcome.

To the physician.—The successful treatment of cough involves five essentials, first, education; second, the removal of the cause when possible; third, hygienic care; fourth, diet; fifth, the medicinal treatment. The education of the people to care for all coughs no matter how little or insignificant they may seem is of the greatest importance. Consumption is often foretold by a slight, persistent hacking cough. The cure of consumption depends more on its early recognition than on any other single factor, therefore we must teach our people to have repeated and frequent physical examinations made when they cough. School children should be sent to their homes with instruction to go to their family physician when they have coughs, and it is the duty of the physician to make a careful, thorough, systematic examination in every case. Epidemics of measles and whooping cough may thus be prevented and incipient tuberculosis recognized and properly treated.

This is a day of preventive medicine and if the public would take one-half the interest in keeping well that they do in trying to get well when once sick there would be a material decrease in deaths from lung diseases, and no cough is too insignificant to be neglected. The removal of the cause is of course necessary. A few times this can be done promptly, as in a cough from foreign body in the ear, a nasal spur, or enlarged tonsils. In some cases it is removed slowly and only after persistent care, as in bronchitis or pneumonia, and in other cases the cause can not be removed, as in cases of aneurysm, heart disease and bronchiectasis. The *hygienic* care of cough is most important. Many patients with bronchitis cough more than necessary. Many individuals may be taught to suppress their cough, for there is such a thing as a habit cough. Teach others to cough and expectorate. This is important in all stages of consumption and pneumonia. See that all sputum, whether influenzal, pneumonic or tubercular, is kept from being expelled anywhere except into a cup or a cloth where it can be destroyed. Teach the patient to keep his expectoration to himself; in other words, to cover mouth and nose when coughing and not throw sputum over others. See that children cover the mouth and nose with a handkerchief when they cough. Regular bathing, out of door exercise in the sunlight, full and deep respirations are useful in all chronic coughs, not excepting the tubercular.

Climate will occasionally do more for the relief of cough than anything else. Witness the relief of the asthmatic and phthisical when they change climate.

The diet in cough depends largely upon the associated disease. In heart lesions a very carefully regulated diet is necessary. In pneumonia with high temperature it is perhaps best to feed little or nothing for a few days. The use of oil, lard made hot and thoroughly rubbed into the chest once or twice a day, is a valuable way to feed a consumptive. In the medical treatment of cough the first question to be asked of ourselves is, Is this a useful or useless cough for the patient? If a dry cough it may be checked by the use of those remedies which stop cough by reducing nerve sensibility. If a moist cough, stimulation of nerve centers is indicated, associated with those remedies which tend to liquefy sputum. There is no single remedy for cough. Medicine is of the greatest value, but must be given for definite conditions. For example, the harsh, bronchial cough of measles can be most quickly relieved by drosera with paregoric in a syrup of ginger. Any bronchial cough of the same character may usually be relieved by the same means.

The cough of simple croup is relieved promptly by lobelia, stillingia and oil of cajeput, as found combined in stillingia liniment compound. Five drops on a little sugar given to a child will give prompt relief. Iodide of calcium acts well in those cases also. But they are useless in diphtheritic croup or tubercular laryngitis. Here inhalations of lime fumes, calomel or beech wood creosote are indicated. Vinegar stupes to the throat are valuable. The cough of a pleurisy is best relieved by bryonia given alone or associated with some opium derivative. It is a useless cough and should be checked. The cough of pertussis is another useless cough. For five years I have used in the spasmodic cough a preparation of solanum carolense and have been able to check this cough in from a week to ten days' time and to modify the severity from the first. This was recommended by Dr. Best. A few cases it has only relieved; in the great majority of cases it cures promptly. I have just relieved this condition in two children who were coughing very severely and in about ten days. I use belladonna with it if the patient is inclined to be drowsy, and give it in glycerine in 20 to 60 drop doses. The suffocating asthmatic cough is best relieved by nitroglycerine, adrin and lobelia, lobelia in 30 to 60 drops of the tincture hypodermatically. The cough of pneumonia is practically always a useful one. When we wish to increase the fluidity of the sputum and stimulate cough the carbonate of ammonia as found in the aromatic spirits of ammonium is very useful, 20 to 30 drops every two hours. Sanguinaria and ipecac are valuable adjuncts and act synergistically. When necessary to stimulate the cough of phthisis guaiacol carbonate and calcium iodide are of much value—here again the vapor inhalations are useful, either creosote or turpentine or benzoin. Some chronic, harsh, bronchial coughs that have not

readily responded to treatment will do so where potassium bichromate is given in 1-20 to 1-60 of a grain every two or three hours. Camphor or menthol inhalations help in these cases. In case of a severe cold, with a tickling irritating bronchial cough paregoric in ginger water drunk hot will give prompt and satisfactory relief. Use a teaspoon of paregoric and a teaspoonful of ginger to a quart of water, as hot as can be comfortably drunk, and have the patient sip slowly. In pneumonia or phthisis, when the cough is difficult and the sputum viscid and slight, with a tendency to dryness of mucous membranes, turpentime is the indicated remedy given in emulsion or as spirits of turpentine in 5 to 10-drop doses. In the cough of a severe bronchitis with much nasal discharge, aralia and belladonna produce results promptly. Aconite, veratrum, rhus tox, stricta pulm., grindelia, chloroform, asclepias, gelsemium, the salts of ammonia, potash and soda all have a decided value in cough, but must be used when definitely indicated. You will remember that the alkaline salts with pilocarpine or apomorphine increase the fluidity of sputum and aid its expulsion, while the mineral acids alone or with belladonna or opium decrease or check secretion of the bronchial membrane. Less than a week ago I saw a case of bronchitis, with considerable harsh cough, a thick viscid sputum, who had been taking various cough medicines for over six weeks, and growing no better. His tongue was heavily coated, whitish, he had no appetite and felt weak and depressed, with a temperature of 100° and a pulse of about 90. He was given soda bicarbonate in 20 grain doses every two hours; aromatic spirits ammonia in 20 drop doses in hot water every three hours. In three days his tongue was clean, he could eat, his temperature was normal, his pulse better, his cough greatly lessened and his whole condition improved. Had he been given acids or cough mixtures with opium he would have grown worse.

Medicines are certain enough—the uncertainty is in our understanding them, and in not using the right one at the right time and in the right dosage. What we need is to study each case individually and select the indicated remedy for the underlying pathologic conditions, as expressed by definite symptoms. It may be opium or its alkaloids, belladonna or its alkaloids, the acids, ammonia, soda or potash salts, or some of the special sedatives.

I am sure we all recognize fully the necessity of a careful study of all symptoms in any given case. The cough, in many cases, is an unimportant symptom; nevertheless, its importance is too frequently under-estimated and this paper is a plea for more care in the study of each case as to causology and the elimination of much useless drugging by the use of the semi-proprietary cough mixtures.

VERTIGO.

Theodore Davis Adlerman, A.B., M.D., Brooklyn, N. Y.

The subject of vertigo may seem to be common enough; in fact, many of you may think it hardly worth while to listen to so common a topic, and yet the treatment of this despised disease presents very many difficulties. I will, therefore, Mr. President and gentlemen, present this paper for your consideration.

Vertigo, or giddiness, can be defined as a disturbed equilibrium, which may be due, in most cases, to some derangement of the nervous system governing the body in its obligations and in its relation to the external world. When this sense, if you so desire to call it, is disturbed or counterbalanced in any way, vertigo results.

I am not claiming that vertigo ought to be and that under all conditions is considered as a separate disease, as in a great many cases, if you look upon vertigo in the right way, it is a symptom of some other condition, associated with some lesion or another.

Some writers claim the Menier form of vertigo is an entity, is a special disease, but if you will remember that Menier's mainly, if not entirely, depends upon lesions in or around the semi-circular canals, then you must agree with me that vertigo is a symptom.

However, no matter if you consider vertigo as a symptom or as a disease its etiology will present to you the same effects and the same causes. Visual defects, such as refractive errors; aural disturbances, such as diseases of the labyrinth, inflammatory condition of the middle ear, toxemic conditions, alcohol, tobacco, constipation, dyspepsia, disturbances of intracranial circulation, organic brain disease, different neuroses, neuropathic conditions, such as neurasthenia, hysteria, epilepsy, brain syphilis, anemia, all contribute to the production of vertigo.

It also may occur in consequence of pressure on the tympanic membrane. Severe and constant vertigo may be caused by a tumor involving the middle lobe of the cerebellum, it may be found in minor epileptic attacks, or it may be caused by diplopia or ocular muscular paresis.

The general symptoms of vertigo come on very suddenly and do not last so very long. Objects seem to swim, whirl, or dance around the patient; the floor may seem to rise and sink; the patient is in some confusion, rather uncertain of himself; he may totter and even fall. Some of the cases may have a certain amount of nausea and some vomiting, with or without prostration. In those instances where it is due to toxic substances, such as alcohol or tobacco, or if it is due to narcotics, the attack of vertigo may last for quite some time.

I believe it is nothing but right to first consider Menier's disease, or aural vertigo, which is mainly due to diseases of the internal ear, in-

volving the end organs of the eighth nerve in the labyrinth. I said "mainly due," because, since its first description by Menier, it has been conclusively shown that the so-called Menier's disease can be caused by different pathological conditions of the nerves of Cyon, even outside of the semi-circular canals. For clinical purposes, however, we will call all these forms as Menier's. The patient is deaf, suffers from tinnitus, erect posture is impossible, and, for that matter, even the recumbent position does not relieve the vertigo. In some cases the attack comes on in an apoplectic fashion; the patient is suddenly taken with a buzzing noise in head and ears. The surrounding subjects commence to swim around like on an axis, nausea and vomiting may follow. Attacks may occur regularly or irregularly. After the attack the hearing is found to be impaired more or less and a somewhat confused condition may prevail. The outcome of the general condition is somewhat uncertain. In most cases it is not such a very hard matter to diagnose Menier's disease, and it is only very seldom that it is confused with tumors of the cerebello-pontile angle, which may cause at times similar symptoms, with the exception that in the last named condition the sudden falling, forced movements and the loss of consciousness will easily differentiate Menier's.

In treating Menier's disease the first and most important factor is the removing, if possible, of the cause and then applying such treatment as the individual case may demand. The patient is at once put to bed, and we administer a brisk cathartic, after which we commence our medicines. Cold to be applied to the head at the same time. Among the drugs found to be of most service are quinine, which is given in doses of 3 to 5 grains, and not more than 20 grains per day. This is the so-called Charcot treatment of Menier's, and I find it gives relief in some few cases, producing a profound deafness, which, however, may be overlooked, considering the many unpleasant symptoms of Menier's. Some cases experience great relief from sodium phosphate taken daily in moderate doses. My results from sodium salicylate in Menier's were purely negative, but my results from two-drop doses of nux vomica and one-drop doses of gelsemium were positive and in most cases brought prompt and lasting relief. It is my habit to increase both the nux and gelsemium to effect, watching the case at the same time. I increase the dose hourly. In many of the cases where the noises in the ears persist, I administer small doses of either physostigma or ergot. Pilocarpine given by hypodermic in small dose (one-sixth grain) also gives you relief in many cases. In all other aspects the general treatment of Menier's disease is the treatme tnoutlined by me in my article on neurasthenia, which appeared some time ago in the National Quarterly.

As I have mentioned before, vertigo is a constant symptom of organic brain disease, such as tumor, disseminated sclerosis, brain syph-

ment should be given daily, and less than three treatments per week is but waste of time and energy.

Milk should be the chief, not the only, food, except for a limited period of time, and the simpler the diet the better will be the ultimate outcome. When called as a court of last resort, to consult upon or attend a case where heart, kidneys and liver are all but at a functional standstill, cessation of all drug medication and the establishment of an absolute milk diet, six quarts in twenty-four hours, being divided into six-ounce doses every half hour during the day with a couple of doses during the night, will postpone the inevitable for a little while longer. It is indeed surprising and almost miraculous to see these water-logged, moribund nephritics, after running the gamut of everything else, gain a temporary respite with a fair amount of comfort, simply by stopping medication and enforcing complete rest in bed, with the above milk diet.

PROLAPSUS RECTI.

Herbert T. Cox, M.D., Los Angeles, Calif.

Prolapsus of the rectum is not uncommon, and may be due to a congenital or an acquired cause. Probably the most frequent cause is a congenital defect in the attachment of, or the development of, the meso-colon of the sigmoid and descending colon. Therefore it will be well to briefly review the embryology of this end of the digestive tract.

In the early stages the digestive tract is a single straight tube developed in the median line longitudinally, and carrying with it a fold of the mesothelium (primitive peritoneum) as it extends into the body-cavity of the abdomen. This fold forms the two layers of serous tissue for the mesentery, carrying the blood vessels, nerves and lymphatics imbedded in the connective tissue between them. As the digestive tract elongates in order that the intestines may accommodate themselves in the abdominal cavity, they are thrown into loops by the folding of the mesentery.

By the end of the fourth month of fetal life this evolution of the bowel results in a funnel-shaped twisting of the mesentery, which is attached to the body wall only at the apex near the region of the attachment of the adult jejunum. The future colon occupies the rim of the funnel, so to speak; the ascending, transverse, descending and sigmoid colons occupying relatively their adult positions forming three sides of this irregular movable rim of the funnel. The developing small intestines form the fourth or lower side of the funnel and run inside, down to the apex, where they are fixed and pass behind to form the duodenum.

Now then, the colon in an adult is more or less fixed, and this fixation now takes place by the posterior layer of this meso-colon fusing with the peritoneal coat of the abdominal wall against which it rests, thus

obliterating the serous tissue and forming a more or less fibrous or ligamentous tissue. Whenever this fusion in the region of the descending colon or sigmoid is not complete, it leaves it more or less movable and subject to downward movement with the muscular effort of defecation or weight of the fecal matter, and consequently rolls out. This may be aided by a loose attachment of the rectum. In other words, lack of support from above. Often this condition is also accompanied by a lack of muscular development in the sphincter ani.

Another congenital defect occurring with or without the other condition is lack of development of the perineum. In the embryonic development the cloacal opening is divided by a growth of the uro-rectal fold into two openings, one for the uro-genital system and one for the digestive tract. The caudal part of this fold then enlarges to form the perineal-body and pushes the anus farther away from the genital organs. If this is undeveloped the pouch of the rectum has less support to hold it up and less surface to which to attach the slack tissue. In this case it is lack of support below. This condition favors a prolapse, which applies more especially to the male, as any slack in the female would be taken up by the tension caused by the descent of the generative organs into the vagina on the other side of this perineal-body.

The acquired causes may be due to atony or dilatation of the sphincter, redundant tissue due to extensive internal hemorrhoids, rectal tumor, or other pelvic tumor, the weight dragging the gut down.

The surgical treatment is based upon three distinct principles, which are laid down by Dr. Binnie, as follows:

1. When the prolapse is due to sphincteric atony or looseness, or lack of perineal support, the principle of treatment is to overcome this condition by narrowing the sphincter and building up the perineum.

2. When the prolapse is due to want of superior support, such must be provided by anchoring folds of the rectum to the anterior sacral surface, or attaching the sigmoid flexure to the abdominal wall.

3. When there is excess of rectum and much tissue is prolapsed, the protruded mass should be excised. Generally this excision must be supplemented by a narrowing of the sphincter or building up of the perineum.

RELATED DISEASES OF THE EYE AND NOSE.

John H. Powell, M.D., Atlanta, Ga.

For many years it has been recognized that diseases of the eye and those of the nose were often associated and inter-dependent. In certain cases pathological conditions originate in the nose and extend, by continuity of tissue or by migration of morbific germs, to the eye. Occasionally the reverse process occurs. More recently reflex ocular disturbances arising from nasal affections have received attention.

W. F. Mittendorf says: "Inflammatory conditions of the lining membrane of the nose are, perhaps, the most frequent of all the causes of inflammatory actions in the tear-passages. How often do we see diseases of the conjunctiva or cornea—especially those that are accompanied by lacrymation, followed by inflammation of the Schneiderian membrane, and, on the other hand, mild forms of conjunctivitis generally accompany catarrhal inflammation of the nose or the tear-sac."

G. E. de Schweinitz, in his work on the eye, 1893, says: "Diseases of the lacrymal sac are rarely primary. In nearly every case of disease of the lacrymal sac and of the lacrymo-nasal duct morbid conditions of the nasal chambers and of the naso-pharynx are present. Although it might seem natural that conjunctivitis, and especially purulent conjunctivitis, should cause lacrymal disease, this is by no means frequently the case. Conjunctivitis and blepharitis, so often accompanying diseases, follow rather than cause the lacrymal affection. Obstruction of the duct and diseases of the sac are sequels of measles, scarlet fever, and especially smallpox, because these exanthemata are accompanied by inflammation of the nasal mucous membrane."

George M. Gould says that in the vast majority of related affections of the nose and eye, the nose is the point of departure of the morbific process, the eye more seldom setting up disease in the nose.

R. W. Seiss has reported several cases of closure of the nasal-mouth of the lacrymo-nasal duct caused by unskillful use of the cautery. The effect on the drainage of tears is evident.

A number of illustrative cases are reported in "The American Year Book of Medicine and Surgery." Among them is a case cited by Panas, in which there was double purulent dacryoadenitis, coincident with a severe tonsillitis and muco-purulent nasal catarrh.

Ramsey, in treating of lacrymal obstructions, advocates the necessity of examining the nasal fossae, of treating inflammatory or hypertrophic conditions found, and of investigating for syphilitic history.

T. K. Hamilton found eye disease in 51 out of 106 cases of post-nasal vegetations. In 6 of these there was blepharitis, in 7 follicular, in 16 granular, and in 22 catarrhal conjunctivitis.

John Dunn believes that in the vast majority of cases of children suffering from phlyctenular troubles there will be found a coincident rhinitis, and behind this unhealthy adenoid vegetations.

D. B. St. John Roosa, in his book on the eye, in treating of lacrymal catarrh, says that in a large proportion of cases it is a purely catarrhal affection, produced by the same causes that bring on catarrh in other parts of the naso-pharyngeal tract, colds in the head, and catarrhal conjunctivitis.

Influenza has given rise to orbital cellulitis, and out of three such cases recently, two have died of the influenza.

Fischer attributes cases of chronic conjunctivitis, trachoma, iritis,

keratitis, and glaucoma to ozena; and gonorrheal ophthalmia has been traced to infection by way of the nose and the lacrymal canal.

An appearance of excessive lacrymation may be caused by an obstruction to the passage of tears into the nose, due to ethmoid disease or pressure of a nasal polypus or other growth on the nasal duct. On account of this the tears flow over the lids and cheek (epiphora).

Ethmoid disease may produce sufficient pressure to increase the distance between the eyes, causing the globes to protrude and giving the appearance known as frog-face. These variations in the anatomical relation of the bones of the orbit and the recti-muscles may produce disturbance of the functions of the eye, such as strabismus and astigmatism; or over-development of the sphenoid bone may produce pressure on the optic nerve and impair or destroy its functions. Thus it will be seen that a growth in the nasal fossa exceeding the natural limit of the cavity may be the cause of serious ocular disturbances.

Hansell referred double optic atrophy in a young man to a purulent disease of the ethmoid and sphenoid cavities. In 1882, and later, Hack called attention to the probability of reflex ocular symptoms originating in pathological conditions of the nasal cavities. He also observed the causative relation of inflammatory conditions of the Schneiderian membrane to sick headache, neuralgia, cough, asthma, pain and swelling of the eyelids, and that, while the ordinary treatment for these latter affections was ineffective, they yielded to measures which restored the pituitary membrane to its normal condition. The nasal diseases that are the most prolific of ocular manifestations are chronic hypertrophic rhinitis, especially when there is contact, pressure, and even adhesion of the nasal septum and turbinals, acute rhinitis, inflammation of the membrane lining, the sinuses connecting with the nose, ulceration of the nasal membrane, ozena, and polypoid growth.

The reflex conditions that may be excited have reference to the sensibility of the eye, to the character of the secretions, to motility, and to trophic and vasomotor disturbances.

S. S. Bishop, of Pennsylvania, observes that discomfort of the eyes and lids and vasomotor disturbances are sometimes the reflex effects of the nasal mucus membrane. He lays especial stress on spurs of the septum-nasi and hypertrophy of the turbinate bodies as causes of these troubles, asthenopia and headache. Ocular disturbances that cause a profuse flow of tears give rise to nasal hydrorrhea and chronic rhinitis.

In all inflammatory conditions of the conjunctiva lacrymal apparatus, especially those with a chronic history, a careful inspection of the nasal cavities should be made, the condition of the mucous membrane, the size, shape and position of the turbinated bones, adenoids, polypoid, ulcerated and bleeding spots, if any.

The nasal septum looked over for deviations, for ulcerated and bleeding areas, look for and inquire into the history of all discharges, deter-

mine if mucus or pus, and where they come from and the cause. Your patient may have ethmoid, sinus or anthral troubles.

After completing your examination of the anterior nose, proceed with the naso-pharynx, examine the tonsils, and this should be properly done, especially if the tonsils are of the submerged variety; use a curved probe, inspecting the crypts for secretions and pus, the pillars for adhesion pockets, and ulcerated cavities; get the history of coughs, tonsillar and rheumatic attacks with the rhinoscopic mirror, or, better, with your finger. Carefully examine the post-nasal space for adenoids and other growths and abnormalities and advise their removal if found. This procedure has been carefully followed in my practice for years, with excellent results, in all chronic inflammation of the eye and lacrymal apparatus. In fact, I seriously doubt if any person could have healthy eyes, ears or good digestion if the nose and throat are very much wrong.

The writings of S. S. Bishop, of Chicago, and Henry D. Noyes of New York, have been freely consulted. To them due credit is acknowledged.

POST SURGICAL CARE.

Wm. P. Best, M.D., Indianapolis, Ind.

Judging from limited observation, there is a tendency among general practitioners to hand to a friendly surgeon their operative cases and wash their hands of future responsibility concerning the welfare of such patients. Further, we have observed that many patients are led to hope for, or permitted to expect, full and complete recovery from a long chain of disturbances, some one or more of which depend on a surgical condition, from surgical interference alone. Care and treatment of patients, subsequent to operative precedures, have brought us to the conclusion that this amounts to neglect of the patient's welfare and abuse of confidence.

Primarily no surgeon is so well acquainted with all of the pathology in a case as is the family physician. This is no reflection on the ability and judgment of a skillful and well qualified surgeon. The former has in most instances had the care and observation of each case over a period of months, perhaps years, before the advice of the latter is sought, and it is manifestly unjust to the surgeon and the patient that the case rest entirely in the hands of the operator, who sees the conditions from a surgical aspect chiefly, if not wholly.

Again the operative case is not usually under the immediate supervision of a surgeon after leaving the hospital, and we are positive in our views when we say that the period of convalesence and reconstruction are of just as much importance as the first weeks of convalescence in the hospital.

This may not apply so pertinently to acute cases or the uncomplicated surgical condition. But in the chronic sufferers, who present many phases of disturbance, physical and functional as well as psychic, the aftercare by

the family physician is of great importance. For this reason the family physician should see the operative work, should co-operate with the surgeon, and their united efforts should not cease until the patient has regained a good measure of health and self-confidence.

Referring to our second point, it is pitiful and painful to see a patient drifting for months or years in post-operative convalescence and reconstruction when the idea of immediate relief has been entertained. A patient has a right to know that weeks, months and many times years are necessary for complete restoration if that is at all probable. It is a shameful abuse of confidence to have a patient living in the hope of that which can not be realized, or daily expecting that which conditions will not justify until nature has had time to complete a cure, perfect a convalescence and restore health and strength wasted by long suffering and anxiety.

Because of this it is our duty to inform the patient that the operation is of necessity the primary and a long step toward recovery. No one is so well fitted nor has so good an opportunity as has the family physician to minister unto the conditions present and those which develop and to cheer and guide the patient through post-operative convalesence.

DISCUSSION.

Dr. H. H. Helbing (St. Louis): The paper is very thorough and has left nothing to be said, except an instance that came to my mind of a controversy between an Allopath and myself over the fact of my allowing the family physician to give the anesthetics. He said he would not think of such a thing for a moment, allowing a man to come in who had possibly given very few anesthetics, and minister to his patients; he would insist on a specialist in that line. I did not agree with him. I told him that a man who was confident of himself was capable of giving an anesthetic, and especially it is good for the patient. The patient will lie down on the operating table with greater confidence in the hands of the family physician than under a strange anesthetist. Her state of mind is a thing that is dwelt upon by Crile, of Cleveland, and you all know this is of great importance. For that reason alone I think the family physician should be the one to give the anesthetic.

Dr. W. E. Kinnett (Peoria, Ill.): This is one of the most important things we have in surgery, the after-treatment. We operate on them and then almost forget our patients. We do not follow them up. We do not look after them as we should. I am sure a large per cent. of failures in surgery is due to that fact—that we do not follow up the case with after-treatment and care. It is natural if you operate on another physician to think he knows how to look after himself, but if I operate on another physician I look after him just the same as if he were not a physician. You should see the patient every day and examine the wound yourself if you want success.

Dr. L. A. Larsen (Colfax, Wis.): After a patient leaves the hospital as a rule we never see them and we forget them. The family physician takes it for granted that everything has been done and ignores the patient, thinking the patient will recover. I agree with Dr. Best that this is absolutely wrong.

Dr. Robert E. Holmes (Harrisburg, Pa.): There are a good many things to be considered. I do not agree that every doctor who takes a patient to a hospital should give the anesthetic. If you have an anesthetist

who is efficient, it is your duty when you take a patient to the hospital to introduce him to the anesthetist and say, "This man is very efficient and better able to administer the anesthetic than I am," and your patient will have confidence in him.

In regard to the care of the patient after operation, there are surgeons who are so busy that they can not attend all the cases they operate. Some cases can not stay at the hospital as long as they should, and the surgeon can not get around the city to see all the cases he operates.

Another thing is that we take our patients to the hospital and they are operated on and they pay the hospital fee and the surgeon's fee, and they do not expect to pay our fee, so we get very little out of it. In some places they split the fees. They are trying to put that down in our state, but I do not know but what it is a good thing to make the fee large enough to split. Of course the general practitioner does not get as much out of it as the surgeon.

Dr. E. G. Sharp (Guthrie, Okla.): I am very much impressed with the idea that Dr. Best's paper is very pertinent, and I am further impressed by the difficulty referred to, that the trouble is due to lack of co-operation between the surgeon and family physician. When the family physician refers a case to the surgeon it is his duty to follow the case. It is the duty of the surgeon to see that the case is referred back to the family physician for after-care after he has done his work.

Dr. S. O. Barwick (Elkhart, Ind.): I do not want to repeat what I said last night about anesthetics, but I believe in every case the anesthetist should be qualified to do the work, just the same as the surgeon is qualified to do his work. And there is one condition in giving an anesthetic that I have not heard mentioned, and that is the fact that there is a great nitrogenous waste and of course a nitrogenous breakdown during the giving of an anesthetic. Where we have increased nitrogenous waste there is only one way that is to be eliminated, and that is by way of the kidney. If we have faulty kidney elimination following operation, we may expect trouble with that patient, and I think that is one reason why there is an excessive amount of vomiting in some cases. This is also true in chronic diseases where we have excessive nitrogenous waste, especially in Bright's disease, where you can see day by day the patient is wasting away. The thing to do is this: In addition to the examination of your patient for albumin, use the freezing test. You can determine what degree of nitrogenous waste the patient is undergoing by this test. So many physicians are satisfied with testing for albumin, but I would test every patient who gets an anesthetic by the freezing test of the urine to see what is going on.

Dr. L. T. Franklin (Chillicothe, O.): What do you do about a patient where you do not have the time to make this test—say an acute appendicitis?

Dr. Barwick: You can not sacrifice your patient's life for a man who is too busy to look after the case.

Dr. William P. Best: I am very much pleased with the discussion of my paper. However, some of the ideas are not relative to the paper. The chief idea I wished to express is that very few patients that require surgery get well immediately after operation; they must have after-care; they must have a competent physician to give them that care. It is up to the family physician in most instances to carry on this work, but he can not do it if he does not co-operate with the surgeon; he can not do it intelligently if he does not keep that patient under his observation, treat her according to the conditions that arise from time to time and that exist at the time of the operation. I think it is highly essential that you tell your patients in all

chronic cases that the operation is the beginning of their getting well—that subsequent care is necessary, and every doctor, whether he is paid for it or not, should do his best to see that his patient does get well.

GOITER.

Margareta Wilkenloh, M.D., Chicago, Ill.

Goiter or bronchocele, an enlargement of the thyroid body, the whole gland, or one or the other of its lobes may be involved, sometimes the isthmus alone.

Clinical History.—From 1896 to 1917 over 400 cases of goiter came under my treatment; of them 378 were female and 17 were male. The age of the youngest female was eleven, the oldest seventy-three; the age of the youngest male was thirteen, the oldest fifty-three. A majority were from sixteen to forty-five years of age. It occurs in certain families from one generation to another.

Varieties.—Simple or parenchymatous, acute or inflammatory, fibrocystic, exophthalmic and malignant.

The simple form occurs more in young subjects—203 cases, mostly female and single. The growth is uniform and one side may be slightly larger than the other; more often it is the right side. In this kind of goiter the tumor is soft; there are no distressing symptoms, only a swelling in front of the neck which increases before the menstrual period and decreases after the menstrual flow ceases. Climate predisposes, especially where it is chilly; some influence on the sympathetic nervous system, exposure and over-work were causes in thirty-three cases.

Acute or inflammatory goiter follows contagious diseases. Eight developed goiter from influenza, seven from scarlet fever, twenty from parotitis, bronchitis, pneumonia or pleurisy attacks. The thyroid gland modifies the normal function of its glandular elements. The streptococcus was found in the inflammatory varieties associated with large tonsils. In acute cases the enlargement of the gland is rapid, with rapid pulse-beat from 120 to 140 per minute, rapid breathing and a variety of symptoms such as shooting pains in the glands.

In the 260 cases of fibrous form the disease made its appearance more frequently in pregnancy and after childbirth. It is a nodular, encapsulated tumor, located either in the right or left side; very seldom is it central, unless the isthmus is involved. There were sixty-nine enlargements of the right side, the rest left and central, including the isthmus.

The cystic form is more frontal. There is one or more cysts, filled with a clear fluid or with blood. The veins are large and the tumor is very vascular, and makes its appearance towards the age of forty. There are two varieties, accompanied by other diseases, such as diabetes, rheumatism, gonorrheal infections, chronic nephritis. In some the pulse

is irregular, small and compressible. eHart murmurs are frequent, and pulmonary or systolic murmurs in two-thirds of these cases.

In exophthalmia (Graves' disease) constitutional symptoms are great. Tachycardia and tremor of the hands were the most constant symptoms. Those with gonorrheal infections or rheumatism had tremor of the lower extremities, cerebral disturbance, with pronounced indigestion, high blood pressure with tumefaction on left side in some cases—in others both lobes and the isthmus were involved. In forty females the chronic exophthalmia was due to exposure, overwork, prolonged grief and anxiety, complicated syphilis, tuberculosis, chronic alcoholism or mercurial poisoning. In fifteen males, of whom eleven were married, two were epileptics, five alcoholics, four tuberculous, and four were gonorrheics and rheumatics.

Prognosis good in all single and acute forms; no return of the goiter in young single patients. In married women the goiter returns with each pregnancy and vanishes as soon as the child is born.

In cases complicated with tuberculosis or syphilis the goiter tumor is somewhat troublesome. Four cases of tuberculosis were treated by tonsillectomy with good results.

In one tubercular male, married, age thirty-seven, the goiter tumor was central, including isthmus, fibroid and exophthalmic. This case resisted treatment for months; the adhesions were broken up so as to make the tumor movable, and the cerebral symptoms disappeared, and the patient passed through an operation with good results.

Male, aged forty-two, exophthalmic goiter complicated with epilepsy. This patient received four months' treatment. Prognosis good as to both goiter and epileptic condition.

Two females, married, but childless, had exophthalmia; one of them, syphilitic, had a great desire for stimulants. These cases were treated for seven months; tumefaction, with tremor and mental symptoms, disappeared. The alcoholic patient died after two years at the age of thirty-nine.

In another female, forty years of age, gonococci were found in the goiter substances, and examination of urine showed gonococci in great quantity, with polyuria. Patient died at the age of forty-three.

In regard to treatment, the general malnutrition should receive attention, prescribing diet according to complications.

A simple form of medicinal treatment is as follows: External appliance over tumor of libradol or turpentine, which helps to decrease tumor and assist internal treatment. As internal treatment I selected echinacea, iris, phytolacca, pulsatilla, tiger lily, macrotys. Hypodermically, directly into the goiter tumor, echinacea or echafolta. First I have the field of the injection, myself and the instruments, all thoroughly clean; I use a long, strong, sharp-pointed needle, rub the tumor with echafolta for its anesthetic effect so as to reduce the tension; the patient will then

not feel the needle. I inject from 1 cc. or 16 drops to 4 cc. or 60 drops, the injection repeated every third day, and increase the dose according to the patient. After the injection I massage and knead the tumor thoroughly, apply echafolta over the site of the injection, and use adhesive plaster to protect from infection.

In the acute or inflammatory form I not only use echinacea hypodermically, but also veratrum where the blood pressure is high; gelsemium or lobelia in oppressed feelings with difficult breathing, and these same specific remedies I have given internally.

In the fibroid form, in cases of married women who are pregnant, I never give hypodermic injections, but treat them according to indications. If the female reproductive organs are disturbed, this disturbance influences the nervous system. This should be treated locally to remove the cause of irritation.

In the cystic form I have injected thuja and given internal remedies such as apocynum in gonorrheal infection; gelsemium is a great remedy for rheumatism; macrotys, bryonia or collinsonia or thuja in syphilis, staphysagriai n diabetes, chionanthus or hydrangea. As to external appliance, where the veins are large and lying external to the tumor, beware of turpentine and the original libradol, as they only will produce irritation and hemorrhage will be the result.

In the exophthalmic form the internal remedies should be carefully selected, for each case has a different complication. The best internal remedies are echinacea, nux vomica, pulsatilla, scutellaria, crataegus. These remedies will assist the hypodermic injection of echinacea.

In the malignant form I have used thuja hypodermically, and the carbonate of magnesium for external appliance.

CLINICAL OBSERVATION OF CELL ATONY.

Chas. Woodward, M.D., Chicago, Ill.

The cells of the physical body are subject to chemical reaction, irritation and stimulation, expansion, contraction and nerve exhaustion, disproportioning of the acid and alkali secretions, paresis, inflammation, infection and meteorologic influences. The cells become affected first, and, with the exception of trauma, produce symptoms that are determined as conditions, and specific remedies are prescribed to control these conditions.

Most persons exhibit transitory and permanent symptoms. The former are easily overcome, but the latter, which have been developing for a lifetime, are usually overlooked. Is it reasonable, then, to expect that the control of the transitory symptoms will restore tonicity to the cells? Foods are chemicals which exert a stimulant influence, with resulting relaxation, on the cells. With the increase of prepared foods much of the nation's nourishment has acquirred irritant and stimulant properties which produce imperceptible reflex action at the expense of cell dynamics. This action on the cells and

the diagnosis of evanescent symptoms have been the causes of many therapeutic failures and the increasing resort to surgery.

The high mortality of our army is swinging back the pendulum with opportunities for the therapeutists to recover their lost prestige. This lost prestige may be regained by a better knowledge of how irritative and stimulative foods develop pathologic conditions and by adhering to the following considerations:

First. Determine definitely the initiatory cause of cell atony.

Second. The cells perform their reparative functions at a slow movement, and stimulative foods and imperceptible reflexes increase and obstruct their work.

Third. Observe the secondary causes of local inflammation, as it is the greatest factor of all intractable and organic diseases.

Whenever general atony of the cells is present, the prescribing for one or two prominent local symptoms usually exerts only a palliative influence. Therefore, to treat successfully the diseases of aged persons one should be able to determine the etiology and the perverted degree of the cells.

To show the necessity for determining the condition of the cells the following case, similar to many, may be cited:

Mrs. B., age 81, whose lifelong nourishment had consisted more or less of stimulative foods, was affected with cell atony and the accompanying permanent symptoms of perverted metabolism and circulation, inelastic skin and a cyanotic, sallow complexion. But the chief local trouble began to be noticeable thirty-five years after the menopause, when her uterus lost its atrophy and acquired metritis, edema, ulceration of the endometrium, sanguineous discharge and infection. Intra-uterine medication, which is more and more being considered the conventional treatment, controlled the inflammation and infection.

While the importance of controlling the local condition is apparent in this instance, the treatment alone proved to be only palliative until the cell atony, metabolism, capillary circulation and complexion were improved by the following prescription: ℞ Calcarea fluor ix grs. x, sp. belladonna gtt. vi, distilled hamamelis oz. ss., aqua, q. s. oz. iv. M. Sig. One dram every three hours.

I have seen many cases of rheumatism, in both young and old, recover by restoring tonicity to the cells and circulation when other treatments failed. These experiences with many others furnish conclusive proof that almost all local diseases are more or less closely associated with the general condition of the cells.

It is not difficult to determine the permanent conditions that result from cell atony, such as perversion of the metabolic processes, circulation, skin, complexion, bowels and a deficiency of the blood. A section devoted to pathology should therefore be included in the program of every medical association.

CITY AND COUNTRY OBSTETRICS.

W. E. Daniels, M.D., Madison, S. D.

Just why the city should be divided from the country may be plain to our chairman or to you, but having had experience in both I have never been able to learn any difference in a parturient woman whether she be in our country home or in the city. I am sure that so far as the real sickness is concerned they are identical.

Of course there are many points that are very unlike—for instance, exercise. With our well to do city patients we have trouble in getting them to exercise, but with our country patient, with help so very scarce, it is a question of preventing them from over exercising. Then, too, there is the matter of dress. In our cities, and especially if our patient is rather inclined to society, they persist in wearing corsets and tight fitting underwear, while in the country most any old thing will do if it is clean and comfortable. Again, in the cities where everything can be had—and in the country we depend on what they raise—diet must be looked after, and right here let me remark that diet in all cases ought to be one of our chief concerns, both for the mother and child.

It has been my observation that meats and heavy, rich food should be forbidden, and a light, nourishing diet insisted upon being used, especially the last few months of gestation.

In our cities we are to see our patients often or they are able to come and see us, and in the country where the roads are bad it may be you will never see your patient until you are called to the case, and then you will find things not prepared for you, so in the country the doctor must carry a Kelly pad or perhaps a rubber and plenty of sterile cotton and gauze, while in the city that can be obtained at the nearest drug store.

Then, too, is the matter of assistance. In cities we can at least get a practical nurse or a graduate nurse to assist us and look after the case when we are through. It is not so in the country. There may be a neighbor woman present to wash the baby the first time, and then the case is turned over to the hired girl or the eldest girl at home if there be one, and yet strange as it may seem, and perhaps you who live in the city can inform us, but nevertheless there are more cases of infection in city than in country practice. Is it meddlesome mid-wifery? And in my opinion that has much to do with it, or is it because we use the same articles each time and that we fail to properly disinfect them. Not long ago I was in a well to do country home near the city and the man immediately informed me that he did not want me to use a pad, and when I asked his reasons he said Dr. G. confined my wife something over two years ago and he brought his pad with him, and we had him because he attended Mrs. So and So. But do you know every case he attended developed child bed fever, and when he went to our neighbor near here they told him about it and told him they thought it was the pad that infected them and asked him not to use it in their case, which he

did not and they escaped infection. The facts are, with me, that if I can have the patient prepare several pads of cotton and clean newspaper covered with a sterile cloth I seldom use a pad, and when I use the rubber I use a new one or use rubber sheeting and throw it away. It only costs about fifty cents per yard and a yard is enough.

I suppose you are aware that the professional requirements are not the same in the country as in the city. You may do some things in country practice that you would be held accountable for in city work, and the supreme courts of many of our states have so decided, because in the country you are compelled to do many things and alone and no one to even assist you, while in the city there would be no excuse for it. For instance, placenta previa with hemorrhage. You are fifteen or twenty miles away. No telephone connections and roads impassable, and to secure help would mean several hours and before that time had passed your patient would be beyond help. What must you do? Only one course left for you to do and that is go at it and do your very best, and the courts have always held that you "possess reasonable knowledge, and show reasonable skill as compared to those who practice in the same community." In the city if you encounter some unusual case and that case can be, and ought to be, handled with skill and you do not possess that skill, and then fail to obtain that skill the courts hold you accountable even if you did your very best.

Well do I remember my first city case, which was in a Swedish family. The young girl was making her home with a sister and was taken with a "violent cholera morbus" and I was called. It was in the night, and when I arrived things were "going some," but in a few moments the pain ceased, but in a few minutes returned. Now I had seen cases of cholera morbus in my pre-medical days and this case seemed different, so I examined the case and suspected pregnancy and asked if it were so and she said it was not; but early in my professional life I learned not to believe all that patients tell me, so I put up the bluff that my medicine would cure cholera morbus, but if she was pregnant it would make her dreadful sick, and then ordered a glass of water to mix up my medicine, and while the sister was gone to get the water the patient said if I would lock the door I could examine her, which I proceeded to do and found the case well along in the second stage. She was an ugly dispositioned white-headed Swede and proceeded to order her sister and the neighbor woman to leave the room and not return till she called them, and my, what a relief to me, for I suppose I was acting as green as they make them. So she ordered me around and I was patient with her and in about three hours the child was delivered.

I remember equally as well my second case in the city and that was in a colored family and the mother was a young girl of 16 and the father of the child was her brother, and when I told the old lady that the girl was going to have a baby she "blowed up." Did you ever pour kerosene oil on the fire when there were live coals and have it smoke for a few moments and then

explode? Well if you have you have the picture. I was ordered out and to take "that no-account nigger with me," which I did not do.

Well do I remember my first instrumental delivery as well as my first version, and both were in the country fifteen or eighteen miles away and no help but a kind-hearted neighbor woman to assist. Strange as it may seem, I have delivered something over 2,000, made twenty-five or thirty versions and many instrumental deliveries, and only three deaths, and strange as it may seem all have been city cases, and in all of the cases I had assistance. Perhaps it has been due to the fact that country women as a rule are more vigorous than city women.

In a paper of this kind there is not much room for presenting new thoughts, but I can not close without putting in one plea for the mothers and coming mothers of our country and that plea is this: that the laws of our country should be that coming mothers and those who are mothers should be *compelled* to not work for a period of two or three weeks before delivery and an equal number of days after confinement.

One of the first duties of a country is to protect its citizens, and when the citizen is not capable of protecting himself, then the state or nation should step in and protect him, and if we protect our mothers during the great ordeal of bringing a soul into existence we have not only prolonged her life, but helped to save the child. It has been a long established fact that in cities where there are factories and the coming mother is compelled to work in these factories before and after delivery, that infant mortality is greatly increased. Not only that; the fecundity of the female is greatly retarded or made totally sterile.

If, as in some of our states, we pension women who are rearing children, why should we not provide for her welfare during a few weeks preceding and after delivery and put her on full pay?

To me it is the plain duty of the nation to protect the woman during her days of gestation and prohibit her from entering any of the hazardous occupations during her child-bearing period, and provide for her comfort during this period.

DISCUSSION.

Dr. W. E. Kinnett: I have wondered why half the people I attended in obstetrical cases years ago did not die. We did not have anything as we have today. Sometimes in the country I did not get a chance to wash my hands. But fortunately they did not die. But there is a difference in the practice of obstetrics in the city and in the country, for I have tried both. I sometimes think the country doctor is more proficient in taking care of cases than the average city physician, for this reason: When you go ten or fifteen miles away from home you have to do many things and you have no one to help you. You may have to perform a version or a high forceps, and no one to help you. Many a time I have given the anesthetic and turned a child too. But we do not need to worry about that nowadays.

Dr. W. N. Mundy: In the part of Ohio from which I come the country girl is just as intelligent as the city girl. She goes to college and is educated and when I go there I find things prepared. I often have them come in and

ask me for a pamphlet or something they can read to learn how to take care of themselves. If there is anybody under heaven who is prosperous in the section in which I live it is the farmer. I can not see any difference in the method of parturition in the country than in the city—and do not tell me they wear "any old thing" in the country. They are just as well or better dressed than the city girl. I have never seen such filth in the country as in the city.

As for the Kelly pad—I discarded that thirty years ago. It is unsanitary.

Dr. W. H. Wagner (Peru, Ind.): I have received patients in my town that knew Dr. Mundy. He says he discarded the Kelly pad thirty years ago, but I use it in every case of confinement. I have heard other doctors argue in favor of using paper, or old comforts or things of that sort to prevent the flow from coming through to the mattress—but I go back to my Kelly pad. I have two, and while I use one the other is being vulcanized.

I do a country practice, and what Dr. Mundy says is true. These patients demand the same attention as those in the city. But the greatest trouble is with the practical nurse, because they are telling all the time what the other doctor does and does not do. If you have a trained nurse she does exactly what you tell her.

Dr. Wright (Ohio): I use a Kelly pad and I always cleanse it and sterilize it. I have never had any infection from the Kelly pad. The infection comes from the physician himself, from not having himself clean, and then when he makes the preliminary examination the infection is carried in. I do not examine my patients very much after I find the location of the head.

Dr. W. F. Briney (Chicago): I run a small lying-in hospital here, and after the influenza epidemic we had a good deal of septicemia. Every one of these septicemias had had influenza. I had sometimes eight or ten cases on my hands at one time. We tried to discover the cases with infection, but many times they were brought in without examination. I have used the Kelly pad for fourteen years without a case of septicemia until this last winter. It first started with the colon bacilli infection.

Dr. W. E. Daniels: Of course children are not born now as twenty-five or thirty years ago, and I suppose there is a difference between the country I live in and that Dr. Mundy comes from. We never had roads as bad as this past winter. If they were not muddy they were frozen like iron, and it would take you six to fifteen hours to get as many miles. So there is a difference between city and country practice in that respect. And there is a difference when it comes to new country like southwestern Minnesota and Dakota, when you make a visit thirty miles away. If you need help there you are up against it. The country practitioner undoubtedly has to do some things the city practitioner does not need to do.

HOOKWORM.

D. E. Saxton, M.D., Tampa, Fla.

I suppose an article on hookworm was assigned to me because I live away down here in south Florida in the semi-tropics, where the hookworm lives, moves, and has its being. You fellows who live away up in the North do not have to contend with the little pest. I know, for I practiced up there in northwestern Missouri for a number of years before coming to South Florida.

The hookworm is found in all the Gulf Coast States, and the further

south you go the more numerous they are. It is claimed that they were brought to this country by the Africans who were kidnaped and brought here for slaves. Whether that is true or not I do not know. As the worm abounds in Africa, and no history of them is given before the Africans were brought here, it may possibly be true.

What interests us most here in the South, where we have to deal with them, is the prevention and cure. Here is one of the striking illustrations of Nature's adaptation of means to secure the end. Our climate is warm the year round and thousands of children go barefoot from Christmas to Christmas—probably never wore a shoe in their lives. Now this tiny microscopic bug is watching for some little barefoot to come along, and as soon as that bare foot is planted on the bug that bug is planted on that foot, and he immediately digs a hole through the skin and finds his way into the circulation of the blood, and when that blood gets around to the intestines the little wretch knows it and proceeds to dig through and attach with those little hooks that nature has provided to the mucous lining of the intestine—and there she is, ready to propagate her specie by laying thousands of eggs to be carried out into the soil to hatch out another crop.

The prevention of hookworm is simply to wear shoes and protect the feet from coming in contact with them. The cure is to eradicate them from the system and clean them out of the bowels and the blood also.

The principal drug used heretofore, and still in use, is thymol. The reports of some fifty thousand cases of hookworm treated in the South Sea Islands with the oil of chenopodium, without a single failure and with no bad results, has been made by different physicians. From five to ten drops or minims of the oil (according to age of patient) is used. The treatment should be followed by castor oil, and chenopodium given in capsules.

We have another condition existing in this country that is unknown in the North. It is called "ground itch," and it is claimed by some that it is caused by the hookworm; but I think it is different. "Ground itch" causes the toes to blister and itch, and the skin will peel off, and in some of the worst cases the toes nearly rot off, and the odor has a sort of dissecting-room smell. I know of a number of cases having this trouble that have not been barefoot a day.

In the true hookworm "ground itch" the little varmint gets under the skin and burrows along like a ground mole, and all along his track is a little raised ridge.

We have sore toes in this country occasionally, but, thank the Lord, we don't have chilblains.

Now, for the benefit of our brother practitioners here in the South, I will tell you what I have been using for over thirty years here in Florida to cure this stinking, rotten, so-called "ground itch." You simply make a solution of potassium permanganate, about 10 grains to the

ounce, and with a little cotton on a little stick, mop the sores several times a day, and sometimes I apply a small piece of the saturated cotton between the toes, and I will guarantee a cure.

COLOTOMY—OPERATIVE TECHNIQUE AND MORBID CONDITIONS REQUIRING THE OPERATION.

B. Roswell Hubbard, M.D., Los Angeles, Calif.

Colotomy is the technical term for the operation performed to open the colon once it is exposed through an incision in the overlying soft parts. Colostomy is a synonymous term quite commonly used by authors and writers in describing the operative work.

By way of a little historical comment, I will say that about the earliest history we have of this operation dates back to the year 1710, when Littre, a Paris surgeon, performed the operation for the cure of imperforate anus in an infant. Following this period Bryant and Hilton did a similar operation in Guy's Hospital, London, but it was not at that time in great favor by either surgeon.

It is quite easy to state, in a general way, the class of cases to which colotomy is best adapted. They are: congenital malformations of the rectum below the sigmoid flexure; pronounced stricture and morbid growths that threaten the life of the patient through obstruction, as well as extensive ulceration, both benign and malignant; encroachment on the lower rectum by cancerous growths in adjacent structures; vesico-intestinal fistula will justify this operation and will prolong life, if not a cure.

Colotomy is not considered a dangerous operation when executed under anything like favorable circumstances, that is, if done before the patient is exhausted by suffering from the ravages of a morbid condition. The successful outcome of the operation depends largely on the skill and experience of the individual operator. The writer knows of one surgeon who reports forty odd cases of colotomy for various causes with but one death. Such a record speaks well for the operation and should commend its adoption for relief, if not a cure, in colonic and rectal obstruction. If executed early the operation will retard the growth of cancer and sarcoma and offers the only relief in pronounced stricture that will, if left to its usual course, terminate in closure of the gut, followed by rupture. During the intervening period the patient suffers untold pain and distress.

A sufferer from chronic obstruction lives in constant peril, for he knows not at what hour the morbid state will change into a fatal condition, and after acute obstruction once occurs operative dangers are, in a great measure, increased.

In malignant disease of the rectum excision may offer the operation

of choice; however, if the affected area is manifestly beyond the reach of excision, an inguinal or lumbar colotomy at once suggests itself.

The chief objection usually offered by the patient to having a colotomy done is the thought that an artificial opening or anus is likely to be permanent, but when it is explained that subsequent closure can easily be made should the primary cause finally be overcome consent is readily obtained.

The lumbar and inguinal regions are the usual sites chosen for doing a colotomy, with the preference given to the latter because of the ease of caring for the artificial opening subsequently by the patient, both as to the cleanliness and applying the controlling pad. As the peritoneum is opened in both regions, the post operative danger must be considered the same.

The successive steps in the operative procedure are as follows: In other than emergency cases the site of the external incision should be prepared in the usual way by shaving the integument, following with washings with soap and water and bichloride or bicarbonate of soda solution, thus rendering the skin immune from common infection, which, needless to say, makes the opening of the abdomen ordinarily safe. The incision, some three inches in length, should now be made about two inches inward from the anterior superior spine of the ilium on an imaginary line extending from this point to the umbilicus and crossing it nearly at right angles.

The incision may have to vary in length and location to meet exceptional morbid states, as, for instance, when the sigmoid flexure is involved in the disease it is carired higher than usuall in order to reach the diseased area. The soft structures overlying the peritoneum are usually divided layer after layer on a grooved director; the serous membrane is next picked up with thumb forceps and divided the length of the cutaneous incision, utilizing the director to protect the gut beneath it from injury.

Usually a portion of the gut presents in the wound once it is made. This should be carefully examined to decide whether or not it is the part wanted to further the operative procedure. Usually a coil of the large intestine presents, and to make sure it is the part wanted an examination should be made for the longitudinal bands of muscular tissue, otherwise known as appendices epiploica, which are a normal feature of the lower bowel.

Should a coil of the small intestine present in the incised wound it must be pushed aside and with the finger an effort is made to bring into view a portion of the large bowel which is usually found near the brim of the pelvis. In executing this part of the work care must be taken not to injure the bowel, as rupture of the gut has occured from extreme violence exerted during this manipulation owing to a thinning of the walls resulting from obstruction and consequent distention.

As soon as it is determined that the portion of the bowel wanted is brought up into the open wound it should be drawn downward until the position indicates a moderate tension on the mesentery above and there secured to the upper and lower angle of the incised wound by silk-worm gut or chromasized cat-gut sutures in a way that will alolw somewaht of a sharp

spur of the gut midway between the anchoring sutures. The object of placing the anchoring sutures is to prevent a displacement of the exposed portion of the gut during straining or vomiting while the patient is under the anesthetic.

The next step is the suturing of the gut to the edge of the wound by separate silk sutures, which are passed through the skin about one-eighth of an inch from the edge of the incision and on through the cut edge of the parietal peritoneum, care being taken not to perforate the lumen of the bowel, yet a sufficient bite of the muscular wall must be taken to form a firm adhesion. If possible the extruding portion of the bowel should be so placed that the stitches, at least on one side, may be passed through the longitudinal band of the gut to insure a firmer union. The sutures should be placed well back toward the mesenteric border of the gut that the bulk of the same be well outside the incised wound after all of the sutures have been passed.

The number of sutures that are required to secure the bowel to the margins of the wound will depend on the extent of the incision, usually ten to twelve are sufficient to give close approximation.

In cases of extreme obstruction requiring opening the bowel at once the subsequent dressing should consist of a piece of protective tissue placed next to the wound, over which a pad of antiseptic gauze is laid followed with sufficient absorbent cotton to not only produce the necessary amount of pressure to prevent the escape of bowel contents, but absorb all moisture escaping from the wound surfaces. Finally, this dressing is held in place with a broad obstetrical bandage.

If gauze is placed next to the wound subsequent dressing will find the texture pressed into the tissues, making its removal tedious and painful. Except in exceptional cases the first dressing may remain in place for two or three days, the patient during this period being fed on fluid foods, mainly milk, unless for some reason it is contraindicated.

The patient is placed at rest in bed and given occasional sips of iced tea or ginger ale to relieve thirst, giving no opiates except the local pain be unbearable.

In cases of obstruction or other morbid state requiring more operative work, it can be executed usually by the third day, as at this time quite firm union has taken place between the serous surfaces closing the peritoneal cavity to external influences.

The opening in the exposed knuckle of the bowel is made longitudinally with the bistoury or sharp cutting scissors, removing the central portion of the anterior part of the gut within a third of an inch of the border. What little hemorrhage occurs during this part of the work can usually be controlled by pressure.

At this juncture of the operation, with the bowel open, it is evident that two openings in the lumen of the gut will present, the larger one opening into the end of the upper section, and the smaller one in the lower segment, and at this point in the operation the object of establishing the sharp spur

in the gut becomes apparent; as the posterior portion of the gut remains intact the position that the part now assumes prevents the passage of fecal matter from the upper opening into the lower opening, a condition, should it occur, which detracts to a great extent the object of the operation.

For some time at least the lower segment should be left open at both ends that the rectum may be washed out with a syringe, thus freeing it of any morbid accumulations that might possibly find their way into this portion of the gut. It is well to mention that in making an artificial opening in the gut that as much of its circumference be preserved as the morbid condition will permit of in case later phases of the local disease will justify closure of the artificial anus.

I previously remarked that the fold of bowel should be well drawn down before suturing it to the margins of the incised wound. The object to be obtained in doing so is to prevent a prolapse of the mucous membrane following the opening of the gut, which often takes place when this is not done.

After the operative procedure bowel movements are usually regulated by diet and daily habits of the patient. The diet should be composed of such articles of food that will not provoke diarrhea. An evacuation every two or three days will usually give the patient comfort and the assurance of being able to control bowel movements with properly adjusted pads and bandages. Thus fortified, the patient is able to attend to his duties and enjoy life.

Different kinds of dressing have been devised to be worn following the operation. Some prefer a thick pad held in place with a truss fashioned somewhat like the one worn in inguinal hernia, while others feel more secure when the pads are held secure with two or three turns of a wide bandage around the waist.

PASSIONMANIA IN RELATION TO METAPHYSIC.

Stanley Tommasello, M.D., Greenwich, Conn.

Nothing is perfect under the sun.

Did any one who lived and illuminated this planet with wisdom and philosophical doctrines show or affirm a perfect stability on whatever was by the same performed or said?

No. Not even our religious founders, in a true sense of the word, could be called perfect men, because in themselves, with a strict synthesis, we all find some fault in some way or another in their philosophical theories.

Why? Because these religion founders were born in different parts of our planet, and to correct the ill habits and the ill passions of their people they did use the most convincing way to control their deficiencies. But these so-called prophets never could conquer the whole world with their single doctrines, because many races were unwilling to accept doctrines of strange prophets, as said doctrines were in bitter contrast, metaphysically, with other people's lives, and many races preferred the doctrines of their racial

deities instead of giving up their habits of easy life, full of passion and extravagancies.

Was Mohammed a sane man?

No. He was lacking in his most elementary theory of justice, ordering his followers to use their swords against any people; applying the egotistical formula in the living life was enough to obscure his immortality for ever, if there was any.

What to say about the extremo-oriental peoples, perhaps the Japanese, when they sacrifice their lives in holocaust of their dead emperor to let him appear omnipotent toward the almighty Budda?

What to say about the Christian religion when it mentions to give to the poor what is in excess at our table instead of sharing our food with them?

What to say about Moloch when he mentions to cremate living children to save pestilences and other horrors to his people?

Now I could mention many other examples of passion—religious insanity —but leave it to you to consider the subject.

Now what I wish to substantiate is that many persons confined in many asylums are ill selectioned, because what kind of mania the patient is suffering from, that is only a state of hypnotical stasis, production of a family and an elementary education. Even with higher bred people we find a metaphysical taint of spiritual toxemia, and even they are living subconsciously. In many an American institution for the insane are confined thousands of cases belonging to many different races of foreign born, which, with a judicious psychological selection (made by a psychologist of the same nation as the patient came from) we could save millions of our dollars and also misfortunates from a true insanity.

We have people suffering from women's jealous mania with a murderous instinct, because they were intoxicated, since from their infancy they believed that the best manner to wash a dishonorable spot a blood wash was necessary.

On the contrary we see men attracting women and speculating on their beauty with a disgusting cynicism. In any place on our planet we go we will always find difference of opinion, in science, in religion, in industry, in love and in habit, because in each community (call it race, people or whatsoever you like) we find different souls have a metaphysical tendency, and if we do not study carefully the character of the people we never will be able to diagnose the exact maniacal tendency. Every one of us has a weak spot, and that spot I call our mania, for which our nervous cells are working, some time, with a force and quickness like lightning.

SURGICAL COMPLICATIONS OF INFLUENZA.

F. M. Andrus, M.D., Lincoln, Neb.

Of the surgical complications of influenza, the two most frequently mentioned ars otitis media with mastoid involvement and empyema following influenzal pneumonia. Several authors state also that appendicitis and

cholecystitis cases increase in years when influenza is prevalent, and that many of these cases if not due to influenza infection may be attributed to the general lowered resistance following influenza.

Of the ear complications of influenza, Dr. Dench says:

"Mastoid complications following an influenza otitis are, perhaps, not more common than mastoid complications following an otitis of equal severity and depending upon other causes. In mastoid involvement following influenza, however, a hemorrhage type is not infrequent. . . . Most cases require early operation."

Dr. Smith believes, however, that "in all severe acute suppurative diseases of the middle ear the mastoid is more or less involved. In those complicating influenza a much larger percentage develop into suppurative mastoiditis that requires operative intervention than from other causes."

Dr. Deaver considers that empyema is the most important of all surgical complications of influenza, and he discusses this condition and its treatment at some length. He states that empyema in influenza cases is to be treated first by aspiration, and later, when the fluid becomes sero-purulent or purulent, by rib resection. With those conclusions other authors noted agree.

In regard to appendicitis as a complication of influenza Dr. Deaver says: "A number of authors have noticed an increased incidence of appendicitis in influenza years. Many of such cases most likely are pseudo-appendicitis due to the gastro-intestinal symptoms that so often are a part of influenza, and others are undoubtedly genuine appendicitis resulting from the increased virulence of the usual intestinal micro-organisms, and particularly to a predisposition on the part of the person to appendix trouble."

In the epidemic of 1918 all authorities are agreed that ear complications were less frequent and much less severe than in previous epidemics. Very few cases required a mastoid operation. Thus Stone and Swift, reporting on over 15,000 cases of influenza at Fort Riley, say: "Clinically otitis media with tenderness over the mastoid area was a complication in a great many cases. . . . Patients who presented a bulging drum as evidence of otitis media required paracentesis. . . . Six patients with otitis media-mastoiditis came to operation."

While pneumonia was the most frequent and most severe complication of this epidemic, empyema was comparatively rare. A number of empyema cases are reported, however, by recent writers. Stone and Swift noted sixty-five cases of empyema.

Major Beals, reporting on cases from Camp Custer, says: "During this epidemic there is no fulminating type of empyema and no urgent demand for operation. The best results obtained in the empyema cases if operated when the pus became thick."

Dr. Kennedy says in regard to surgical complications in the epidemic of 1918: "One remarkable feature in this epidemic is that we have not had the usual great number of operations for appendiceal or gall-bladder conditions which uniformly follow or accompany the ordinary influenza epidemic. . . .

Another important point is that we have not had the usual number of operations for empyema which follow the ordinary pneumonias. In the cases where it has been necessary to open the chest cavity we have not found the pus collection at its usual location or in the usual amount." This is due to the fact that these surgical complications are caused by streptococcus infection, with its "diffuse and infiltrating modes of extension" .. . . which are little influenced by either serous or mucous membrane. For this reason, he states, "the surgery of the lung in this epidemic will not be followed by the brilliant results obtained in the ordinary empyema following a classical pneumonia, as the accumulations of pus are small and multiple, indicating the mode of infection, and little accessible to surgical drainage."

"The metastases following this epidemic have been most typical of streptococcus infections in the formation of multiple abscesses in the muscular and connective tissues. . . . These multiple muscular lesions are an indication that the infection travels by or through the lymphatics of blood vessels and not by the normal membrane." These multiple abscesses are noted only occasionally by other authors. They were apparently not frequent complications. On the other hand, Dr. Goldstein states that in this epidemic, as in others, "appendicitis has been reported as being on the increase during and following the epidemic."

Majors Hall and Dyas, reporting from Camp Logan, state that a marked increase in the number of cases of appendicitis operated during the time of the influenza epidemic indicates that there may be a relation between the two, although they are unable from their data to arrive at any exact conclusions. They say: "It is extremely suggestive that on the first day of the influenza attack so many patients showed such definite signs in the region of the appendix as to lead to a diagnosis that proved to be incorrect, assuming our opinion on this point to be well founded. If this symptomatology was dependent, as we believe, on involvement of the lymphoid tissues of the appendix, we may well conceive that in many other instances a definite inflammation resulted which eventually demanded operation. Perhaps we are not far wrong in assuming that the epidemic, characterized as it was by a phenomenal activity on the part of many different pathogenic organisms, gave special opportunity for the development of inflammation of the appendix, but whether by reduction of the general bodily resistance, by exciting a new attack in a chronically affected organ, by its action on lymphoid tissues, or by an infection through the bloodstream or otherwise, does not appear."

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DIET IN INFLUENZA.

Byron H. Nellans, M.D., Cincinnati, O.

One of the most interesting phases to me, in the care of our influenza patients, was the diet. Early in the epidemic its vast importance was forcibly brought to my attention. I found that, while I was able to break up the acute attack and all its concomitant symptoms, the patient persisted in running a temperature anywhere from 99.5 to 103. Careful and persistent search for usual complications were negative, and I was at a loss to account for the fever. Finally my attention was directed to the diet. I had been giving the usual light diet, i.e., milk, milk-toast, eggs, broth, weak tea, etc., hot liquid diet. This was withdrawn and fruit juices and more acid drinks were given—grape, pineapple, orange juice, weak lemonade, grape fruit, etc., and plenty of good cool water at all times. Immediately the temperature would assume a normal level and remain so.

Then it became imperative, in all my influenza cases, that from the start nothing but fruit juices and plenty of good cool water was to be given. I found the course of the disease shortened, had less complications, and patients themselves felt better, no gastric disturbance, and really enjoying more sharp acid drinks than the milk, etc. This diet was continued until the temperature had held normal for forty-eight hours, then the patient could have milk, beef broth, etc.

I recall a few cases where my instructions in regard to diet were not fully carried out when the temperature had reached normal. Milk or beef broth given in the first twenty-four to thirty-six hours, even after the temperature was normal, would immediately cause a rise of temperature, back-set the patient, and it would take three or four days to get him lined up right again.

So my conclusions are, the fruit juices only should be given until the temperature has held normal for forty-eight hours, then come along with milk, broth, eggs, etc.

The feeding proposition should receive the same careful study and consideration as does our study of symptoms and the indicated remedy.

ASCLEPIAS.

J. E. Holman, M.D., Indianapolis, Ind.

Asclepias tuberosa, the root which is in part used, belongs to the family of Asclepiadeae and is commonly called pleurisy root, butterfly weed, orange swallowwort, wind root or tuber-root. There are many plants on the order of asclepias, but the one which is most important from a medical point of view is asclepias tuberosa.

Though growing most abundantly in the South, it may be found as far north as Massachusetts, preferring gravelly and sandy soils. It blooms in June, July and August, and when in flower forms one of the most conspicuous and handsomest features of a summer landscape.

The official part is the root. It is spindle shaped, of a light brownish color on the outer surface, and white, coarse and striped within. In a fresh state it has a disagreeable, slightly acrimonious taste; when dried its taste is slightly bitter. Boiling water or alcohol extract its virtues. The infusion is undoubtedly the most effective medicinal preparation. When the infusion can not be obtained, specific asclepias is next preferred.

The chemical composition and active constituents as found by Mr. Elain Rhoads in this root gum were pectin, starch, albumin, gallic and gallo-tannic acids, salts, an odorous material of a fatty nature, two resinous bodies and a fixed oil. A peculiar body or principle by process of chemical reduction of the root gum was ascertained by Quackenbush in 1889 to be a glucoside, and was obtained by him in a crystaline condition. He also detected a fluorescent body, but no tannin.

Asclepias has an extensive range of usefulness, being possessed of diaphoretic, diuretic, laxative, tonic, carminative, expectorant, and probably antispasmodic properties. It differs from most diaphoretics in producing a true secretion from the skin that more nearly resembles the normal function of insensible perspiration than any other agent of its class. It increases largely the elimination of solid material to the exclusion of copious perspiration. While it is serviceable even where the temperature is high, it does its best work where the temperature is but moderately exalted, and when the skin is slightly moist or inclined to moisture, and where the pulse is vibratile and not too rapid.

Pleurisy root has a deservedly good reputation in respiratory diseases. It acts upon the mucous membrane of the pulmonary tract, augmenting the secretion and favoring easy expectoration.

As its popular name indicates, pleurisy root is of much value in treating pleurisy, pleurodynia, intercostal neuralgia, rheumatism, pleuropneumonia and pneumonia. Hyperemic states of the breathing organs usually call for asclepias. In pneumonia, as well as in bronchitis, it is best adapted to the acute stage. However, I have always found a place for asclepias in either pneumonia, pleurisy, bronchitis or any catarrhal condition of bronchial mucous membrane.

Asclepias is serviceable in dry asthma with fever, but lacking the spasmodic element. As a remedy for dry, constricted cough it is excellent. Ordinary colds, any catarrhal condition of mucous surfaces, are materially benefited by asclepias. Some writers say that asclepias is very useful in stomach troubles, particularly those of children when associated with colds or nervous impairment. Likewise diarrhea and dysentery, when of catarrhal character or due to colds, are benefited by it.

In exanthematous fevers it favors the eruptive process, and in painful inflammation gives some relief by its diaphoretic action.

Asclepias is not an active agent, yet on the whole, though apparently a feeble remedy, when indicated it accomplishes a purpose which no other remedy in the materia medica fulfills.

Asclepias has been used in various forms, including powder, strong infusion, specific and fluid extract. The specific asclepias is most commonly used and dose is one to sixty drops.

GERMS AND THEIR WAYS.*

E. P. Zeumer, M.D., Cincinnati, O.

Diseases are divided into two general classes, namely, contagious and non-contagious; by this we mean that they may or may not be transmitted from one person to another. To the first class belong such diseases as smallpox, measles, scarlet fever, tuberculosis, typhoid and others. To the second class belong such maladies as heart lesions, kidney disorders, tumors and apoplexy. All of the contagious diseases are transmitted from one person to another by means of small living organisms called germs, bacteria or microbes. These organisms have been revealed to the scientist by the aid of the microscope, as they are invisible to the naked eye. All bacteria are not disease producing, and while there are over 1,500 varieties there are only about seventy that are infectious in their action upon the human body.

Some bacteria can not live in healthy or living tissues, but require dead animal or vegetable matter for food. They are called saprophytic, and act upon the dead animal or vegetable matter in such a manner as to cause it to resolve into substances which serve as nourishment for plants

* Written for "Moonbeams," a monthly journal published for the employees of the Proctor & Gamble Co., Cincinnati, O.

higher in the vegetable kingdom, which in turn furnish food for man and animals.

Thus you see that some bacteria are absolutely necessary to our growth and development and are essential to our existence.

The disease producing germ, however, is detrimental to our existence, and while it grows and flourishes in our bodies it produces or throws off substances called toxins that interfere with body function and cause disease. A great number of these disease producing organisms have been isolated, and among the most common and more prevalent are those causing colds, influenza, pneumonia, typhoid, tuberculosis. There are also a number of diseases that are no doubh caused by bacteria but the specific organism has not been isolated or identified as yet. Such diseases as smallpox, scarlet fever, infantile paralysis, measles, mumps and others are under constant observation by bacteriologists who are endeavoring to locate the specific bacteria that cause them.

There are essentials necessary to the growth and development of bacteria. They are food, proper temperature and darkness. The human body supplies all their requirements. Most bacteria do not flourish long outside of the body and owe their existence to a direct transfer from one person to another. They gain entrance to the body through the respiratory and digestive tract and through the skin by way of cuts, abrasions and bites of insects. They leave the body by way of the nasal passages and mouth during the act of breathing, coughing and sneezing and by way of excreta from the kidneys, bowels, and also by means of pus from wounds, boils and other infections.

Care must be taken at all times to guard against infection entering the small scratch, cut or abrasion. The loss of a finger or an arm may result from any of these so-called small wounds. Death from these infections is not uncommon.

The important thing then in solving the problem of the transmission of disease is to prevent the bacteria from traveling from one person to another. If one is not expelling these germs from his body he can not pass disease on to others.

There are five routes over which bacteria are carried from one to another. Four of these are called public, and are water, milk, food and insects. The fifth is a private route and includes any way in which fresh discharges of one person are passed directly to another, such as coughing, sneezing, kissing, etc. This private route is the most important because it can be controlled to a great degree by each individual. Man himself is the great causative factor in the spread of disease and the human hand is the great carrier of disease germs to and from the body. Keep unclean hands away from the orifices of the body, particularly the mouth. If this were done many diseases would cease to exist.

It would seem from the foregoing that the human body is in a very dangerous position and it appears somewhat surprising that the human

race has not long ago ceased to exist. This would be the case were it not for the natural defenses of the body. Some of these defenses are purely mechanical. For instance the unbroken skin is usually impassable to disease germs and they are harmless on the skin unless there be a cut or an abrasion allowing them a point of entrance. The mucous membrane of the nose, mouth and throat catch many bacteria and prevent them from entering the lungs. The saliva acts in many instances as an antiseptic, destroying certain forms of bacteria. The stomach juices also act unfavorably on bacteria and prevent their growth.

Typhoid bacillus affects the bowels and seems to have very little effect when injected into the skin. The resisting power of different individuals varies greatly. Some are more prone to disease than others. Many contract light forms of disease while others exposed in the same manner and at the same time develop a severe type of the malady. Certain races of people are more susceptible to various forms of infection than others. The negro is more susceptible to small pox than the white or Caucasian race. Some animals are immune to diseases that affect man, and the human race is not susceptible to some diseases that affect animals. Cattle are immune to typhoid. Man and animals alike suffer from tuberculosis. This power of resisting disease is called immunity. It is present to a more or less degree in all persons. It may be natural or it may be acquired. A natural immunity is that which enables a person to resist disease without the aid of outside help. An acquired immunity is that condition that is brought about by the aid of antitoxin serums, vaccines, etc. An acquired immunity is also brought about by an attack of certain forms of disease. For instance, one attack of chicken pox, small pox, scarlet fever or measles renders one immune to future attacks of the same disease. Many diseases, such as pneumonia, erysipelas or tonsilitis lay a person open to future attacks. As stated before, by the use of various serums, vaccines, etc., one can become immune to the inroads of certain disease.

Small pox vaccine stands forth as an example of the use of these products. Typhoid vaccine and its timely use during the great world war saved many lives that would have been lost by the typhoid fever route.

The same is true of the use of antitoxin for the cure and prevention of diphtheria.

Certain factors, such as exposure to cold, fatigue, insufficient and unsuitable food, poor atmosphere, worry, excesses of all kinds, and insufficient sleep have a tendency to lower the natural resisting power our body possesses. By lowering this resisting power we naturally make ourselves more susceptible to infection, and any effort to avoid it is a step in the right direction.

Many persons carry in their bodies, and are constantly expelling, by way of body secretions, various forms of disease producing bacteria, and

show no symptoms of the disease themselves. These people are called "carriers." Typhoid has been spread in this way. Diphtheria and scarlet fever have been contracted from people who apparently show no marked symptoms of the disease. Others suffer with a communicable disease in such a mild form that they are able to go about their duties, mingling with their fellow-workers and spread the infection over an entire community. One can contract a very severe form of disease from another person suffering with a mild form.

Diseases that are contracted from the use of food, water, milk and from insects can be controlled by the boards of health and by public action. Diseases spread by the individual in the act of sneezing, coughing and improper disposal of excreta can be controlled by himself and his actions. It is a matter of personal hygiene. Ignorance of the laws of health, methods of living, etc., is an obstacle to progress along this line, but with our modern methods of education, much is to be expected in the future.

Let us close this article by giving a few simple rules that will aid in keeping up the natural resistance with which nature has endowed us.

Air.—Stagnant air is harmful. Every person requires about 3,000 cubic feet of air each hour. It should be fresh and should have the proper amount of humidity. The temperature of a room should be about 65 to 70° F. and should have a humidity of from 50 to 55 per cent. High temperatures and stagnant air cause headache, nausea, restlessness, drowsiness and may result in loss of appetite and anemia. So let us ventilate our homes and our working and our sleeping rooms.

Cleanliness of Houses and Dwelling Places.—A clean house or home is a joy and pride as well as a healthy place to be in. The kitchen, where food is prepared and the places where it is stored, should be clean and sanitary. All cooking utensils should be washed and scalded at proper intervals. The hands of the cook should also be thoroughly cleansed before touching the food you eat. The proper disposal of garbage is to be looked after. It is a breeding place for flies, and these insects are known to be carriers of disease producing bacteria.

Sewage.—This is a big subject and is constantly before the public health boards. As stated before, discharges from the bowels and bladder contain various germs and constitute one of the most important routes by which germs of typhoid, cholera and other diseases travel from person to person.

Personal Cleanliness.—Keep the body, hands and feet clean. Keep hands away from mouth and nose. Ninety per cent. of all infections are taken into the body through the mouth by way of food, water, fingers, dust and things placed in the mouth.

Proper care of teeth—proper clothing—good nourishing food—rest—avoidance of fatigue—sleep and recreation could all be discussed at length if space would permit, but what has been said will give some idea

of the simple rules to follow in order to keep our body in good working order. Let us finish by saying:

"Don't spit on the sidewalk or in public places.

"Don't cough and sneeze without covering the mouth and nose with a handkerchief.

"Don't close your windows at night—night air won't injure you any more than day air will. It is just as pure as that which we breathe in the day time and possibly in many instances more so.

"Don't neglect scratches, cuts and wounds. A healthy germ and his family likes nothing better than to move into a small cut or abrasion and take up his abode therein and reproduce his kind. In a few hours a large family is living off of your flesh and blood and lowering your resistance and allowing a nice infection to develop that might cause the loss of an arm or hand, or possibly the loss of a life."

Anti-Typhus Campaign Wins Russian Gratitude.

A resolution, recently transmitted through the Russian Embassy to President Wilson as President of the American Red Cross, expressed the gratitude of the people of north Russia and Siberia for the enlarged anti-typhus campaign which the Red Cross had recently undertaken. The resolution was as follows:

"The All-Siberian Union of Zemstvos and Municipalities, the All-Russian Union of Russian Zemstvos and the All-Russian Union of Municipalities, having learned that the American Red Cross intends to extend its assistance by launching an anti-epidemic campaign in Siberia, including arrangements of housing facilities for the sick and refugees, feels that this kind of assistance is most timely and necessary. They sincerely welcome the good intentions of America, and request you Mr. President, as President of the American Red Cross, to give your kind attention to the plan presented by Lieut. Col. Teusler and Maj. Emerson, and extend in whatever measure you find it possible, your assistance to the favorable solution of the question of this aid, for which the population will ever be deeply grateful to the United States."

The Red Cross plans for fighting the spread of typhus which has spread alarmingly with the beginning of winter, include the doubling of its forces and facilities in Siberia. It is believed that in spite of the bad housing conditions and the increased opportunities for infection which winter brings, the course of the disease will be checked.

The National Eclectic Medical Association QUARTERLY

WILLIAM NELSON MUNDY, M.D. . . . . EDITOR.
FOREST, HARDIN COUNTY, OHIO.

J. K. SCUDDER, M.D. . . . . BUSINESS MANAGER.
CINCINNATI, OHIO.

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CORRECTION.—The editorial in the December QUARTERLY, "Blessed Be Such Insane," should be credited to Dr. Adlerman, not the editor. We are sorry such an error should have occurred.

THE 1920 MEETING.

With the next issue of the Quarterly our program for the Atlanta meeting will be completed and we are anticipating a pleasant and successful session.

It is not often that our society meets in the South. True, we met in Nashville in 1917 and Louisville in 1910, Dallas 1913 and Atlanta 1878, Henry P. Piper acting as president.

There certainly can be but few members living who attended that session; if there are any it is exceedingly doubtful if they would be physically able to be with us at this session.

Meeting in the Southland, we should have a large attendance from that section and we trust a meeting as full of interest and profit as was the 1919 meeting in Chicago. We trust that section officers will get busy on the job good and hard until the program is complete.

Final arrangements and completed program should appear in the JuneQUARTERLY.

Atlanta is the metropolis of the South. I have frequently heard commercial men refer to it as the New York of the South. It is a busy, hustling city and no doubt an ideal convention city.

Make your plans now to meet in Atlanta June 15th to 18th, 1920.

M.

ACIDS AND ALKALIES.

Among the many valuable additions to direct specific medication is Dr. Scudder's contribution relative to the acids and alkalies.

Not every clinician has the time or apparatus at his disposal by which he may determine if the system be suffering from hyper-acidity or hypo-acidity.

This fact renders brief, yet distinct and positive, indications of inestimable value to the physician who is in the general prtctice of medicine.

Hyperacidity, or excess of acid in the system, may be definitely known by a careful study of the tongue, for it tells of conditions of the stomach, blood and general system.

Specific conditions in this case, hyperacidity, are revealed by specific symptoms. The tongue is not normally red in color, it is pale, sickly or white looking, depending on the relative acidity and the concomitant conditions. It may be white, dirty white, stained by medicines or food, but the essential condition is the color of the mucous membrane itself. Not only the tongue is pale or sallow, but the lips and mucous lining of the mouth are not normally pink, but are devoid of the color we carry in mind as a standard of health.

To correct this condition we give some alkali. Bicarbonate of soda being the normal salt of the blood, it is more often indicated and prescribed than any. The white tongue, pale, white coated or clean, will be the indication for this salt.

Should the membranes look dirty or a grayish white, the coat dirty white and the breath foul, we would then prefer the sulphite of soda. The specific indications for the sodium sulphite are the dirty white tongue, or the pale tongue with a dirty white coat. Reliable sulphite of soda must be prescribed.

If the pallor of the tongue has a leaden hue, we will then employ the bicarbonate of potash. This remedy is more apt to be indicated in rheumatoid conditions. In prescribing the sodium salicylate for rheumatism or rheucatic conditions it is well to observe the same indication, the leaden discororation of the mucous membranes.

The alkali treatment many times makes the foundation of the entire medication of a case, both acute and chronic.

On the other hand, we are sometimes just as much in need of an acid in the system, and without it the patient does not do well.

When there is too much alkali in the system the specific indications are as marked but very different, and stand in decided contrast to the indications for the alkali.

This condition being the exact contrary of the former, the mucous membranes distinctly tell us what is wrong and suggest the remedy.

Familiar examples of the extremes in either case are seen in different stomach complaints, which may present some striking similarity in end-results yet the cause and treatment are wholly unlike.

We are taught to recognize the excess of alkali or the need of acid by a decided or abnormal redness of the tongue or mucous membranes of the mouth. In the case now under consideration the membranes of the tongue itself are red, regardless of the superimposed coating which may be present; the latter may be of any appearance, but is most apt to be dry and dark—brown or almost black if the system is greatly depressed, or the tongue may be clean, red, raw, cracked or bleeding.

In typhoid and other diseases where the blood and secretions are badly vitiated, the coat will be dirty brown, reddish brown or almost black, possibly mixed with blood. Yet the underlying tongue and membranes are red.

Recently a patient complained of excessive gas in the stomach after partaking of food. Dieting and peptics did not afford any relief. The tongue was abnormally red, slightly coated. We interpreted this to mean need of acid and prescribed dilute hydrochloric acid, ounce one-half; lactated pepsin, elixir, quantity sufficient to make four ounces. Sig.: Take one teaspoonful after eating. Improvement was immediate and cure resulted.

It is easy to demonstrate the specific action of acids, fruit juices, etc., with the specific conditions above mentioned as a basis of prescribing. The acids are not only gratifying to the taste, taken readily or with avidity, but prompt and marked benefit will result and the difference may be that between recovery and death.

With such positive and simple indications we are not surprised to find an acid a specific remedy for a cough, indigestion, infectious conditions, etc., but we must not make the mistake too commonly made of supposing this is a remedy for all coughs or stomach complaints, for it is not; nothing would prove more fallacious. The positive indication must be present, and if interpreted correctly and the remedy selected according to the indications the results will be positive and confidence in specific medication will result.

B.

PNEUMONIA.

It appears from statistical records that pneumonia and dtaths from pneumonia are on the increase, whilst deaths from several of the infectious diseases, such as diphtheria, scarlatina, smallpox and measles are on the decrease. We often wonder why it is. Can it be possible that the nihilism prevalent in the profession is partially responsible, or is it the blind following of every dictum of the professed leaders of the profession?

Our attention was again called to this disease by a recent death in a friend to whom cold applications were applied and the room kept so cold that the attendants had to wear wraps in order to keep comfortable. The patient was a delicate woman and a victim of Potts' disease. I have sen the same result from the use of cold applications in an aged man the victim of pneumonia.

It appears to me that is erroneous teaching to say that ice or cold applications should be used in pneumonia, appendicitis or other inflammatory diseases, irrespective of the physical condition or characteristics of the patient.

I can not believe that ice-cold applications can be applied with impunity upon a person with highly sensitive and nervous make-up. To such it produces a shock. Neither can I bring myself to the position where I would make such applications to an elderly person, who even in health needed artificial heat to keep him comfortable.

It certainly seems that such application should be selected to the condition of the patient in hand, rather than to say apply cold in pneumonia and acute inflammations.

True, the air of the room should be kept cool, but the body should be kept warm. The cold or cool air is intended for respiration, not refrigeration.

It is this indiscriminate and blind following of authority that is responsible for much of the failure in therapeutics. It is the patient that should receive treatment, not the disease.

In other words, study your patient and apply your therapeutic measures according to the conditions presenting themselves, and this applies to local measures as well as to internal remedies. M.

BLOOD PRESSURE.

We do not know but what an editorial on this subject is rather out of place, as we hear and read so much about it that we personally feel it is rather an overworked topic.

Our attention was called to it recently by a case of arterio-sclerosis coming to us for consultation, and whom we feel was rendered neurasthenic by reason of the diagnosis given by a previous consultant.

Our case was as follows: An energetic, hard-working man of sixty-five; sleepless, depressed and apprehensive; afraid he would have a collapse. When questioned as to the nature of the collapse feared, said a stroke of apoplexy or paralysis. Roaring in the head. Systolic pressure 150, diastolic 80, pulse pressure 70. At a subsequent examination the systolic pressure was 138, diastolic 80, pulse pressure 58. The pulse was full and strong; the radical artery on palpation felt sclerotic, being hard and unyielding. No heart murmurs nor irregularity. Examination of the urine revealed nothing. Truly this was a case of arterio-sclerosis. The former consultant gave a diagnosis of high blood pressure and a prognosis of a probable and impending stroke.

The point we wish to emphasize is the "half baked" diagnosis. High blood pressure means nothing unless taken in conjunction with other symptoms. In other words, it is a corroborative symptom or sign and is overworked, overdone.

The diagnosis and prognosis had so worked upon the man's mind that he was unable to sleep, rendered anxious and apprehensive; this, too, in a man already physically overworked and in need of quiet and rest. The prognosis truly had a psychological effect.

Another instance from my case book is as follows: Male, fifty-six, com-

plains of intense headache, dizziness; well nourished, good appetite, but unable to work by reason of dizziness and headaches. The diagnosis given was "high blood pressure and hardening of the arteries." An examination revealed the veins unusually prominent on his forehead, arms and abdomen. The apex beat diffuse and displaced to the left and confined to the region of the apex; cardiac dullness extending to right of sternum; strong epigastric pulsation. The systolic pressure was 220, diastolic 110, pulse pressure 110. My diagnosis was mitral stenosis, with hypertrophy of the heart and an enlarged liver.

This examination was made May 28, 1919. On July 12 I find these notes: Systolic pressure 170, diastolic 100, pulse pressure 70; heart action much better; murmur still perceptible at the apex, as well as one in the aortic region. Heart's action much quieter and patient doing light work.

As improbable as it may seem, this man assures me no physician (and he had consulted several) had ever taken the trouble to examine his heart, being evidently satisfied by taking the blood pressure, which certainly was a serious blunder.

There is much to be yet learned about blood pressure and the conditions of the system which influence it.

As I write this editorial I have before me an article on the "Theories Regarding Blood Pressure," in which I read: "The ratio 2:3 for the diastolic and systolic pressure, respectively, should be maintained by the normal heart regardless of the rise or fall of pressure; and with a pressure of 160 m.m. systolic, he believes that an intact circulation would show a diastolic pressure of from 105 to 110 m.m."

In his conclusions he says that increased systolic blood pressure indicates the presence in the circulating blood either of unexcreted putrefactive products absorbed from the intestine, from the kidneys, from focal infections in the dental alveoli, the nasal sinuses, the tonsils, the genito-urinary tract, or of secretions in abnormal amounts from the glands of internal secretion.

The second and third conclusion we omit, but desire to call attention to the fourth, which reads thus: "It is not believed that either the systolic or the diastolic blood pressure gives any certain indication as to the condition of the cardio-vascular renal system as such; and that when changes in the vascular system are accompanied by hypertension being held to be secondary to the presence of unexcreted toxic products of metabolism in the circulating blood."

If these conclusions are correct, it upsets many of our previous conclusions regarding blood pressure and emphasizes our proposition that the diagnosis of "high blood pressure" is but a misnomer and a cover for work but half done, and is on a par with the diagnosis of "jaundice" or "dropsy."

I have another excerpt before me which says: "The normal systolic pressure for an adult male is 100 up to 150 m.m.; for an adult female 80 to 140 m.m. Beyond these extremes is regarded as pathologic. That at the age of 20 the blood pressure should be 120 m.m."

Another rule I have learned is taking 100 as a basis, add one for every year of age of the patient, which rule would make the systolic pressure after twenty years of age slightly higher than would the first one quoted.

I turn to Mackenzie's "Diseases of the Heart," 1918, and read as follows: "There has been so much nonsense talked and written about high blood pressure, that I am constrained to draw attention to our extreme ignorance of the cause and consequence of raised blood pressure. That we are totally ignorant of the cause, does not prevent many people adopting heroic measures for reducing it without even considering the wisdom or necessity for so doing. That it may be a physiological process for the benefit of the organism is seldom considered. It would not be exaggerating to say that the present state of our knowledge of this subject is so wanting in trustworthy data as to warrant neither a sound prognosis or a rational therapy. In some cases it is associated with manifest disease of the arteries or kidneys, and here a grave prognosis can safely be ventured; but the high blood pressure forms but one datum, and the older physicians could have given as sound a prognosis before the invention of the instrument for estimating the blood pressure."

It seems to me that the quotation expresses our personal opinion regarding blood pressure much better than we are able to do. We have long felt that too much stress has been laid upon the increase of the systolic pressure and no effort made to ascertain the underlying cause.

Again, I am taught that it is the relation between the systolic and diastolic pressure that is pathognomonic, and if the proper ratio is maintained all is well.

Thus we have come to the conclusion that there is yet much to be learned and that whilst the instrument, like the thermometer, is a means of exactness or precision in observation, its decision or measurement is simply a factor or symptom in a complexity of symptoms which go to form the picture of a pathological condition or in making a nosological diagnosis. M.

THE HUGHES BILL.

It is surprising what an amount of objection was raised against the Hughes Bill in Ohio. There is no doubt it was a wise measure in many respects, and would have resulted in great strides being made in safeguarding the health of the people.

Before its enactment the administration of health laws in the rural districts was a farce. Even in the more common infections the enforcement of quarantine measures enacted for the protection of the uninfected was a joke. Health and sanitary measures were often administered by someone wholly incompetent and often ignorant of the nature of the disease and the measures necessary for its prevention. Many times the local health officer was absolutely without training and ignorant of the nature of the disease and the sequence.

Again, in rural communities it is frequently next to impossible to find a responsible person to whom such diseases could be reported and who would look after the welfare of the community. In fact, the only measure was the placarding of the house or the closing of schools and churches, while the "movie" was allowed to run full blast.

We still feel that the Hughes Law was a wise measure and was deliberately killed by the over-zealous politician who overloaded it with its personnel. For instance, in the county in which I live, a strictly agricultural district of about 30,000, the personnel selected for its enforcement consisted of a commissioner, deputy, clerk, health nurse and five district nurses, with a budget for the first year of nearly $30,000, increasing each year for two years. Save in times of epidemics, like in 1918, which fortunately occurs only once in a generation, double the force would not suffice, and in addition would be absolutely helpless.

The fate of the Hughes Law is but another instance in which a wise measure is killed by its friends. The difficulty was that it was over-officered. Too many hangers-on, too many eating at the public crib. In public work, as in private, service should be rendered for the reward received. Unfortunately, it is not so; hence we have an army of commissions, committees and officers, who draw salaries and do little work, and we are thus constantly confronted by a deficit and consequent increased bonded indebtedness and taxes.

The office force in this county was nearly double what it needed to have been in ordinary times, and the zeal with which attaches were annexed to the health department alarmed the people, hence its failure.

It is seldom one will see a measure killed by the protests of people as was this bill. It is the first one in my memory. Let us hope that the next venture will not meet a similar fate, and we await with interest the fate of the Griswold Act. M.

THE CHRISTMAS SPIRIT.

It is no doubt a little too late to see to our readers' "Merry Christmas," but it is not too late to wish you a prosperous year in 1920.

What a contrast there was between the Christmas season of 1919 to that which prevailed in 1917 and 1918. In the two former years many of us entered into the joys of the season with but little zest and interest. Our thoughts were many miles away, centered upon those who were in camp, facing the uncertainties of battle and disease. The uncertainty of their welfare robbed the Christmas season of its usual joys.

The year 1918 brought the armistice and the cessation of hostilities and relieved our minds to a great extent, yet our friends were separated from us, for the Christmas season is usually attended with a home-coming and a gathering around the home fireside again.

The year 1919 brought them home—to many a great welcome, but to

those whose dear ones sleep beneath foreign soil the season will always bring with it a tinge of sadness and sorrow which the festivities of the season can not assuage.

We all sincerely trust our country may never have to face again the conditions that confronted us in the years 1917-18, and we never will if the teachings and admonitions of the "Prince of Peace" control the minds and will of men.

Deceit, greed, avarice and passion are responsible for much of the unrest and misunderstandings among men and nations. When honesty and integrity characterize the minds of men, and it is the people who make the nation, wars and rumors of wars shall cease. The Golden Rule, "Whatsoever ye would that men should do unto you, do ye even so unto them," will assuage the difficulties between man and man as well as between nations.

Would that the Christmas spirit of 1919 could prevail throughout the year. M.

CLASS LEGISLATION.

The above editorial and the unrest in the country brings to my mind the vast amount of legislation that was formerly considered or called "Class Legislation."

There is an exceedingly large amount of paternalistic legislation being enacted, and it seems that much of it is of a socialistic nature. The States and Nation are outdoing the Continent in this matter, and it appears to be all for the benefit of one class.

Article XIV of the Constitution of the United States reads thus: "No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty or property without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws." Yet all these things are of frequent occurrence and the citizen seems to have no redress; in fact, I can not recall a single instance in which the assistance of the courts has been invoked.

During the prevalence of the war, when many of us had sons in France, we at home witnessed strike after strike for higher wages until unheard of wages were paid. Yet our sons in France had to take what the Government saw fit to give them, and at times even failed to give that mite.

I have wandered here from my main thought, which is, has the man who does not belong to a union any right to work or to the protection of the courts when he desires to wrk?

I recently read where a union official in the East was paid $18,000 per year. By whom? The laboring man, who must obey his mandates.

Organized labor has secured the workman's compensation act in many States; also mothers' pension, and is now attempting to secure

industrial insurance; and whilst seeking for itself the benefits of legislation, denies to the non-union man what it claims for itself, the right to earn an honest living, which is vouchsafed to him by our laws.

Its councils and deliberations often seem to be determined by radicals and not by the sober judgment of the American mechanic as we formerly knew him.

Whilst writing this teachers' organizations are trying to have a minimum salary law enacted, whilst at the same time school boards are racking their brains to secure sufficient funds with which to pay the present salaries. The teacher wants more, the farmer or producer wants more, the laboring man seeks more, the Government wants more and enacts the necessary legislation to secure it. As a result the manufacturer complacently tacks all the increased costs upon the articles in question and the consumer pays it all. It seems like an endless chain and the entire question resolves itself into one of selfishness and greed. M.

NEWS AND NOTES.

California.

Dr. William I. Kinsley has located at 832 Fifth Street, San Diego.

Dr. M. E. Eastman has changed his address from 525 Turk Street to 946 Geary Street.

By a law of California, an annual tax of $2, due January 1, 1920, is payable by every individual who holds any form of certificate which entitles him to practice any system of healing art in the state. If the payment is not made within a period of sixty days, delinquency becomes operative and a fee of $10 is required to reinstate the certificate of such delinquent.

Georgia.

Dr. Alfred F. White has been elected Vice-President of the Georgia Board of Medical Examiners.

The Georgia legislature has passed amendments to the medical practice act increasing the requirement of preliminary education in the state to two years of college work in and after the session of 1919-1920; providing for the recognition of certificates granted by the National Board of Medical Examiners and providing for the revocation of the license of any physician convicted of violating the Harrison narcotc law.

Illinois.

Dr. H. B. Martin has removed from Grayville to 948½ Third Avenue, Huntington, W. Va.

R. J. Grimes has moved from Buckner to 112 South Broadway, Centralia.

Dennis Rupp has located at Armington.

The usual annual Conference on Medical Education will be held in Chicago, at the Congress Hotel, on March 1, 2 and 3, on the third day the

regular business session of the Federation of State Medical Board will be held. We hope that a large number of the Eclectic State Board members, a list of whom is published on another page, will be able to be present.

Indiana.

Dr. William H. Haifley has moved to 522 W. Adams Street, Muncie.

Dr. Peter B. Dick is located on Walnut Street, Muncie.

Dr. William P. Alexander is located at 690 Broadway, Gary.

The Indiana State Board of Medical Registration and Examination has recently established reciprocal relation with Alabama, Georgia and Washington. Relations had previously been established with Arkansas, Colorado, District of Columbia, Illinois, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin and Wyoming. This makes thirty-four states with which Indana now reciprocates in the matter of medical licensure.

Iowa.

C. T. Brubaker has removed from McPherson, Kansas, to Plans.

Kansas.

Dr. J. J. Entz has discontinued private practice and devotes his entire time to his work as County Health Officer.

Kentucky.

Martin J. Sauter has located at Ninth and Columbia Streets, Newport.

A. David Echert is located at Third and Overton Streets, Newport.

Massachusetts.

P. S. W. Geddes has removed from Winchendon to Greenfield.

The Boston District Eclectic Medical Society, at their monthly meeting on January 26, 1920, elected the following officers for the ensuing year: President, Frederick G. Phillimore, M.D., 327 Hanover Street, Boston; Vice-President, Wm. G. Brooks, M.D., 359 Boylston Street, Boston; Secretary-Treasurer, Harold N. McKinney, M.D., 79 Warren Street, Roxbury, Boston. At our last meeting we took in twelve new members, and we have good prospects of many more. A committee of three was appointed especially to make a membership drive, and also arrange for banquets at each meeting.

We are pleased to say that during the past year some of our new members have had appointments in hospitals and instructorships in colleges. Orel F. Martin, M.D., of 363 Main Street, Medford, Mass., has been appointed Instructor in Surgery at the Middlesex Colloge of Medicine and Surgery, Cambridge, Mass. Harold N. McKinney, M.D., has been appointed Instructor in Anatomy at the Middlesex College of Medicine and Surgery; also Chief of the ePdiatric Clinic at the Middlesex

Hospital at Cambridge; also Medical Examiner of the Roxbury Boys' Club, Roxbury, Boston; also a member of the faculty of the Commonwealth Hospital School of Nurses, Boston, Mass. Robert H. Mitch, one of our prosperous physicians, has returned from the world's war and is now located at 367 Boylston Street, Boston, Mass., with a branch office in Cambridge, Mass.

Our society has a bright future and I shall do all I can to improve it in every way. HAROLD N. MCKINNEY, M.D.

Michigan.

O. A. Eaton has removed from Cheboygan to Pellston.

Dr. J. E. Outwater has removed from Bronson to Homosassa, Citrus County, Florida.

Missouri.

Dr. J. S. Rinehart has moved from Lexington to 200½ W. Commerce Street, Springfield.

Nebraska.

A. A. Holtman has removed his office from 314 Karbach Building to 515 City National Bank Building, Omaha.

Dr. Wren Morrow, formerly of Winnetoon, has removed to Seward.

C. Elmer Frey has removed from Lincoln to Ceresco.

Dr. Samuel J. Stewart, of Hastings, has been appointed superintendent of the Beatrice Hospital for the Feeble-Minded.

Dr. L. S. Asbury has removed from Rising Sun to Lexington, Mo.

The following graduates of the Eclectic Medical College of 1919 passed the Nebraska Board last June, with the averages indicated: James Howe McLachlin, now serving as interne at the St. Elizabeth Hospital, Covington, Ky., 83 3-4 percent; Robert Chas. Onley, Stamford, Nebr., 84 percent; Edgar Alonzo Elliff, Otego, Kas., 85 5-6 percent; Clarence Elmer Frey. Ceresco, Nebr., who led all the applicants from all colleges in the examination, with an average of 89 1-2 percent. So far we have not heard from any State Board failures in the 1919 class.

New York.

Edward E. Snyder has removed from Binghampton to 104 Lincoln avenue, Rockville Centre.

W. C. Dallanbaugh has removed from Buffalo to 102 Bryant street, North Tonawanda.

Governor Smith, in his annual address to the legislature, recommneds liberal provision for the department of health and redistricting the state so that each community can support a proper health administration. He expresses the view that the time has come when there should be some plan of reorganization within the counties themselves under the supervision of the state authorities. He urges the establishment throughout the state of an adequate system of public health centers, in conjunction with local health activities, where the necessary public health supervision can be provided for all classes of the population. He believes the state should subsidize

local health efforts and thus bring about a coordination of public and private health facilities so that every health center could command the services of a full-time health officer and the necessary public health nurses. He reiterates his belief in the principle of compulsory health insurance for industrial workers. He says that legislation carrying this principle into execution can be so drawn as to safeguard the interests of the medical profession.

Dr. Royal S. Copeland, Health Commissioner, announces that the death rate for 1919 is the lowest recorded in the fifty-three years that the Health Department has been organized. The death rate for the year 1919 was 12.39 per 1,000 population, as compared with a rate of 16.71 for 1918, and 13.94 for the five-year period from 1913 to 1917, inclusive.

Dr. Theodore D. Adlerman has removed from St. John's Place to 696 St. Marks Avenue, Brooklyn.

Ohio.

The same legislature which adopted the Hughes act during the first part of their 1919 session has reconsidered its action and replaced it by the Griswold bill, which has now passed both houses and awaits the signature of the governor to become a law. The Supreme Court of Ohio, in a decision affecting another law, decided that the cities of Ohio could not be classified for purposes of legislation. This decision rendered it necessary to amend the Hughes act, as it classified cities as over and under 25,000 population. The legislature further amended it by removing the civil service provisions, by providing for whole or part time health commissioners, and by making the employment of nurses optional. Under the provisions of the new bill, cities may employ any one as a health officer, but in general health districts the health commissioner must be a licensed physician. The bill still permits counties and cities to have real health organizations and to do effective health work, and is a considerable advance over the old township and village law. The opposition to the Hughes act came largely from the rural districts and was based on the expense of the new system. Two hundred and seventy-six applicants from twenty-five states took the state civil service examination for district health commissioners under the Hughes act. Candidates were just about to be called to Columbus for a personal interview when the examination was called off on account of the action of the legislature.

In compliance with the terms of the law passed by the legislature in March, which went into effect June 25, every hospital and dispensary in Ohio must register immediately with the state department of health. The registration and report will serve as a basis for a survey of the hospital facilities of the state. A division of hospitals has been created in the state department of health to look after this survey.

The regular quarterly meeting of the Ohio State Medical Board was heldin Columbus, January 5 and 6, 1920. The following officers were elected for 1920-21: President, B. R. McClellan; Vice-President, C. E.

Sawyer; Treasurer, S. M. Sherman; Secretary, H. M. Platter; Chief Nurse Eaminer, Ida May Hickox.

The result of the December examination was as follows: Six physicians out of thirty-four failed, seven Osteopaths failed out of thirteen, and only three Osteopaths were successful in the special licensing examination for surgery, which is part of the new provisions in the recent law covering Osteopathy.

The following received reciprocity certificates, on previous state medical board examination.

W. C. Bernard, Univ. Louisville 1911, Texas 1913, to Cleveland.
C. J. Biedenkopf, Rush 1913, Ills. 1904, to Newark.
S. I. Bross, Univ. Maryland 1918, Maryland 1918, to Holloway.
C. J. Buckley, Medico-Chi. Phila. 1915, Penn. 1916, to Akron.
H. R. Conn, Jefferson 1912, Iowa 1912, to Akron.
A. J. Davidson, Univ. Louisville 1909, Ky. 1909, to Piney Fork.
G. A. Filley, Univ. Ills. 1913, Ills. 1913, to Toledo.
W. E. Gallagher, Univ. Maryland 1917, N. Y. 1917, to Akron.
J. S. S. Gardner, Univ. Mich. 1915, Mich. 1916, to Cleveland.
Ethel R. Harrington, Rush 1917, Ills. 1917, to Cleveland.
A. S. Heithaus, St. Louis Univ. 1911, Mo. 1911, to Cleveland.
C. H. Hyman, Harvard 1916, N. Y. 1916, to Cleveland.
D. Kaplan, Rush 1919, Ills. 1919, to Toledo.
Bella Levinson, Univ. Pittsburg 1911, Pa. 1911, to Cleveland.
R. B. Maclin, Meharry 1905, Alabama 1905, to Youngstown.
Sarah P. Roberts, Cleveland M. & S. 1894, Penn. 1894, to Cleveland.
S. L. Scibetta, Univ. Buffalo, 1917, N. Y. 1917, to Cleveland.
W. W. Wilkinson, Jefferson 1915, Penn. 1917, to Cleveland.
J. J. Young, Creighton 1915, Nebr. 1915, to Cleveland.
W. L. Peters, Mo. Medical 1898, Okla. 1909, to Columbus.

On basis of diploma registration: O. P. Dearth, Jefferson 1882, Penn. 1882, to Akron; B. F. Laird, Med. Coll. Ohio 1874, Ky. 1898, to Youngstown.

The following Training Schools for Nurses were given provisional recognition to July 1, 1920: Good Samaritan Hospital, Sandusky; St. Alexis Hospital, Cleveland; Lancaster Municipal Hospital, Lancaster.

The regular semi-annual examination for physicians, Osteopaths and midwives was held in Columbus, December 2, 3 and 4. Thirty-four physicians, 13 Osteopaths and 3 midwives took the examination. The results will be announced January 6, 1920.

At a special meeting of the Board on December 3, the following reciprocity applications were granted on the basis of previous State Board examinations.

A. Borland, Univ. Louisville '05, Vermont '06, to Akron.
L. H. Fitzgerald, Univ. Penn. '17, W. Va. '17, to Woodsfield.
J. S. Goodpaster, Louisville M. C. '08, Ky. '11, to Dayton.

O. Hayes, Tulane Univ. '03, Ala. '03, to Cleveland.
E. R. Hermann, Ills. M. C. '07, to Cincinnati.
W. B. Huntley, Univ. Mich. '14, Mich. '14, to Akron.
Wm. M. Johnston, Jefferson M. C. '07, ePnn. '07, to Akron.
A. M. Kilgore, Rush M. C. '18, Ills. '19, to Akron.
R. G. Leland, Univ. Mich. '09, Mich '09, to Columbus.
H. M. E. Lowell, Northwestern '14, Ills. '14, to Hamilton.
F. B. Roberts, Ind. Univ. '17, Ind. '18, to Akron.
J. A. Schlernitzauer, St. Louis Univ. '18, Mo. '18, to Steubenville.
C. B. Watson, Johns Hopkins '19, W. Va. '11, to Hamilton.

On basis of diploma registration: A. W. Baer, Rush M. C. '89, Ills. '89, to Akron.

C. O. Bayless has removed from 680 Reibold Building to 625 N. Main street, Dayton.

Dr. J. Stanley Runk has opened an office at 135 W. Ninth St., Cincinnati.

H. W. Powers of Amherst is attending the Policlinic of Tulane University in New Orleans during February and March.

Chas. S. Runk has located at 7 East Eighth Street, Cincinnati.

Chas. J. Miller has removed from Stone Creek to Bowerston.

H. F. Minshull is now located at New Lexington.

Carl R. Busse has located at 2311 Beechmont Ave., Mt. Washington.

E. A. Hilty has removed from Pennsylvania to 503 Sixth St., Portsmouth.

Emil J. Alban has opened an office at 795 East McMillen St., and will devote his practice to obstetrics.

Dr. J. Clinton Staats has opened an office at 500 East Fourth St., Cincinnati.

Robt. B. Curl has resumed practice at 2412 Auburn Ave., Toledo.

Dr. P. H. O'Hara has moved from Lewisburg to Dayton.

Dr. J. P. Harbert of Bellefontaine has removed his offices to 135 N. Main St., and opened a private hospital at the same location. His practice is limited to Eye, Ear, Nose and Throat.

Chester A. Price has removed from Lawrenceville, Ill., to 101 West 70th St., Carthage.

Pennsylvania.

E. A. Hilty has removed from Indiana to 503 Sixth St., Portsmouth, Ohio.

South Dakota.

Dr. J. R. McHugh has moved from Aberdeen to Big Stone City.

Vermont.

James Edward Hair has removed from Bridgeport, Conn., to Townshend, Vt.

West Virginia.

Dr. H. B. Martin has removed from Grayville, Ill., to 948½ Third Ave., Huntington.

Wisconsin.

Dr. R. C. Rodecker, one of the former Eclectic members of the Wisconsi State Board of Medical Examiners, was appointed upon the medical staff during the war and was recently raised to the rank of Major, and not being able to hold both positions under the Federal and State law, he resigned, and the Governor appointed his brother, C. W. Rodecker, of Holcombe, Wis., to serve as his successor until 1923.

New Applications for Membership from December, 1919,

MISCELLANEOUS.

The Physician and the Prohibition.

Internal Revenue Regulations 60, regulating the manufacture, sale, transportation, importation, exportation, delivery, purchase, possession and use of intoxicating liquor under the national prohibition act providing for the enforcement of the eighteenth amendment of the constitution, have just been issued by the commissioner of internal revenue.

Previous regulations provided for the enforcement of the war time prohibition law.

Liquor Defined.—Liquor is defined to include alcohol, whisky, brandy, rum, gin, beer, ale, porter and wine, and, in addition, any spirituous, vinous, malt or fermented liquors, whether medicated, proprietary, patented or by whatever name called, containing one-half of one per cent. or more of alcohol by volume, which are fit for use for beverage purposes. This definition includes homeopathic potencies, attenuations and dilutions. It does not include denatured alcohol or denatured rum or medicinal and other alcoholic preparations unfit for use as beverages.

Physician Defined.—The word "physician" is defined as meaning any person duly licensed to practice medicine and actively engaged in the practice of medicine in the state in which licensed. It does not include osteopaths and chiropractors. Pharmacists are any persons licensed under the laws of any state to compound and dispense medicines prescribed by a duly licensed physician and who are actively engaged in the practice of such profession.

Conditions Under Which Liquors May Be Used.—Under the conditions provided, intoxicating liquors may be made, transported, sold and used in the manufacture of medicinal preparations in accordance with the formulas prescribed by the U. S. Pharmacopeia, National Formulary, or the American Institute of Homeopathy, which are unfit for use for beverage purposes:

1. In the manufacture of patented, proprietary and other medicines which are unfit for use for beverage purposes.

2. By retail druggists and pharmacists in the compounding of medicinal preparations unfit for use for beverage purposes, and for dispensing on physicians' prescriptions.

3. By physicians in the practice of their profession.

4. By hospitals and sanatoriums for medicinal and scientific purposes.

5. In manufacturing industrial establishments for first aid treatment.

Alcohol may be used for medication by druggists or pharmacists for laboratory purposes, by dentists and veterinarians in the course of their practice, and by any college, university or institution of learning in any laboratory for scientific research, and in any hospital or sanatorium.

Alcoholic medicinal preparations fit for use as beverages may be used by retail druggists in compounding prescriptions of physicians, by hospitals and sanatoriums for medicinal purposes, and by physicians in the practice of their profession.

Who May Secure Permits.—All persons desiring to manufacture, sell, furnish, prescribe, purchase, possess or use intoxicating liquor must procure permits. Persons procuring liquor for medicinal purposes on prescription of physicians holding permits to prescribe are not required to have a permit themselves. Permits to prescribe intoxicating liquor do not confer authorty other than to prescribe, that is, a physician holding a permit to prescribe liquor for his patients in his practice is not authorized thereby to manufacture or sell intoxicating liquors.

Applications For Permits.—Applications for permits must be made on Form 1404, in triplicate. All three copies must be signed by the applicant, the original being sworn to before a notary public. All three copies must then be forwarded to the federal prohibition director in charge of the administration of the law in the state. The director may issue a permit, such permit being in triplicate, and having the same serial number as the application. One copy of the permit and the application are returned to the applicant.

Full names must be signed to each application. The permit when granted must be conveniently and permanently filed so that it is readily accessible at any time. Any person holding a permit, who moves his place of business (as a physician changing his location) may surrender his copy of application and permit to the director and have a new one issued with the change of location.

Permits issued prior to January 17, 1920, must be renewed as the commissioner may direct, but holders of such permits may continue to operate under them until their new applications are acted on.

Permits isued prior to August 31 of any year will expire on December 31 of that year.

Bonds.—Bonds in duplicate must be filed with the application, except that unless otherwise required by the commissioner, no bonds need be filed by physicians, dentists or veterinarians asking for permits to use intoxicating liquor in the course of their practice, or hospitals and sanatoriums.

Delivery of Liquor.—Whisky and brandy, bottled in bond, for medicinal purposes may be delivered on receipt of permits on form 1410 to hospitals or sanatoriums or to physicians holding permits to purchase liquors for medicinal purposes, or to wholesale or retail druggists or pharmacists.

Permits to Purchase.—Any person entitled to procure intoxicating liquor must submit an application to purchase on Form 1410. This application, when approved by the director, becomes a permit. The applicant must describe the intoxicating liquor in detail, and must give the quanity in gallons of each kind of intoxicating liquor on hand at the time of the application and the quantity in gallons previously received by him during the current calendar year. The application must also show the name and address of the vender, the purpose for which the liquor is to be used, the serial number of the permit held by the applicant, and the address covered thereby. All applications must be sworn to and must be made in triplicate. If transportation is required, one or two additional copies must be made. All copies are forwarded to the director for approval. All permits to purchase expire in ninety days after the date of approval.

Physicians of the homeopathic and eclectic schools, after obtaining a permit to use alcohol or homeopathic potencies, attenuations and dilutions in the course of their practice, may procure such preparations from homeopathic pharmacists. One month prior to the current quarter of the calendar year, each homeopathic or eclectic physician may file an application on Form 1410 in triplicate, for the total quantity of alcohol or homeopathic potencies, attenuations and dilutions which he desires to purchase during the follwing quarter. This application, when approved, becomes a blanket permit to purchase goods for ninety days. It must state the name of the homeopathic pharmacist from whom the physician desires to purchase these preparations. No physician may receive in excess of 15 gallons of alcohol or alcoholic preparations during any one year.

U. S. P. and N. F. Preparations.—Distilled spirits and wines may be used in the manufacture of medicinal preparations in accordance with U. S. Pharmacopeia and National Formulary or the American Institute of Homeopathy, provided they are unfit for beverage purposes. They must contain no more alcohol than is necessary, and must contain in each fluidounce a dose of recognized therapeutic value.

Preparations included in the U. S. Pharmacopeia and National Formulary which are fit for beverage purposes will be regarded as intoxicating liquor and subject to the same restrictions.

Denatured Alcohol.—Alcohol may be denatured by any one of the following seven formulas:

1. Mercuric chlorid, 1:2000; mercuric chlorid, 0.8 gm.
2. Hydrochloric acid, 60 c.c.; alcohol, 64 c.c.; water, 300 c.c.
3. Mercuric chlorid, 1½ grains; hydrochloric acid, 2 drams; alcohol, 4 ounces.
4. Formaldehyd, 2 parts; glycerin, 2 parts; alcohol, 96 parts.

5. Phenol (carbolic acid), 1 dram; tannic acid, 1 dram; alcohol, 1 pint; water, 1 pint.

6. Alum, ½ ounce; formaldehyd, 2 drams; camphor, 1 ounce; alcohol and water, 1 pint.

7. Liquor cresolis compositus (U. S. P.) 10 c.c.; alcohol, 1,000 c.c.

Sale of Denatured Alcohol.—Retail druggists may sell alcohol medicated as above in quantities not to exceed one pint for other than internal use, without physicians' prescriptions, to persons not holding permits, provided that in each case the container bears a poison label. Alcoholic medicinal preparations, not for use for beverage purposes, may be sold by retail druggists on physician's prescription, provided the name of the druggist appears on the prescription in the physician's handwriting. Prescriptions may not be issued for more than one pint of such liquors at any one time. Refilling of such prescriptions is forbidden. Pharmacists may refuse to fill such prescriptions if they have reason to believe that physicians are prescribing for other than medicinal purposes or that a patient is securing, through one or more physicians, quantities of intoxicating liquor in excess of the amount necessary for medicinal purposes, which shall not be more than one pint to the same person in ten days. Physicians may not prescribe liquor for their own personal use.

Prescriptions for Liquor.—Pharmacists filling prescriptions for intoxicating liquor must, at the time of filling, endorse on each prescription, over their signature, the word "cancelled," together with the date on which the liquor is delivered. Such prescriptions must be kept in a separate file. Once a month each druggist must send to the director a list of prescriptions filled by them, showing the names of the physicians, the names of the patients, and the total of liquor dispensed to each patient during the month. Retail druggists selling intoxicating liquors, whether on a physician's prescription or otherwise, must pay a special tax as liquor dealers and must keep such tax stamp conspicuously posted.

Administration of Liquor by Physicians.—Distilled spirits, wines and alcoholic medicinal preparations fit for use for beverage purposes may be administered by physicians to their patients for medicinal purposes, when such liquor is necessary to afford relief for some known ailment, and when delay in procuring the liquor through a retail pharmacist on prescription might result in loss of life, aggravation of the ailment, or intense suffering. Physicians may obtain no more than six quarts of liquor during any calendar year to be administered to their patients only in quantities necessary to afford relief at the time of administration. They may not sell or furnish such liquors to any persons. The total amount of liquor administered to any one patient by one or more physicians may not exceed one pint in ten days.

Hospitals and Sanatoriums.—Persons conducting bona fide hospitals or sanatoriums, engaging in the treatment of persons suffering from recognized disease or ailments (except treatment of alcoholism), may administer liquors to patients in necessary quantities on prescription of the hospital

or sanatorium physician. Such physician shall issue a separate prescription for each patient, but a separate prescription for each dose is not necessary unless prescribed at irregular intervals. All such prescriptions must be in duplicate, both copies signed by the physician, and must show the name of the hospital or sanatorium, the date of issue, the name of the patient, the kind of liquor prescribed, the directions for use, and the amount to be administered during any given period.

Alcohol for External Use.—Tax paid alcohol procured by hospitals or sanatoriums may be issued to attendants for rubbing purposes on prescriptions issued by the hospital physician. Denatured alcohol may be issued to attendants in quantities not exceeding one pint, without a prescription.

Hospital Reports.—Hospitals or sanatoriums must report at the end of each month to the director, sending one copy of each prescription, and must keep the other copy filed chronologically at the hospital. Hospitals or sanatoriums are forbidden to sell or furnish liquors or alcohol to other persons.

Institutions for Alcoholics.—Bona fide hospitals or sanatoriums engaged in the treatment of alcoholism may obtain liquors and alcoholic medicinal preparations for use in the treatment of chronic alcoholism, but only when the tapering off method is used, or when the dosage is steadily reduced until the patient, within a reasonable time, such as four weeks, has lost the craving for alcoholic stimulants. Such liquor may be administered to patients only in necessary quantities and only under the direction of a duly qualified physician employed by the hospital. Such institutions must keep three records, the first containing the name and residence of the patient, age, date of entry and departure from the institution, and the condition for which he is treated. A serial number will be given to each patient when admitted. The second record will show the serial number of the patient, condition for which treated and the amount of liquor furnished him during the period treated. A copy of this record will be forwarded to the director each month, the serial number being used in place of the name of the patient. The third will show the quantity and kind of liquor on hand the first of each month, the quantity received during the month, the quantity dispensed to patients, the quantity used in compounding legitimate medicinal preparations, and the quantity on hand at the end of the month. A transcript of this record will be sent to the director each month.

Use of Liquors in Emergencies.—Intoxicating liquors may be administered in case of accident, shock or other emergency, only by a physician, nurse or other person in charge of first aid stations in manufacturing, industrial and other establishments. Such establishments must keep a record in duplicate, and must transmit a copy each month, showing the amount on hand, the amount received and the amount dispensed, with the date and the name of each person to whom dispensed and the amount on hand at the end of the month.

Dentists.—Dentists may use alcohol for professional purposes in quanti-

ties not to exceed six quarts a year. Applications for permits to use alcohol for such purposes must state the purposes for which it is intended.

Laboratories.—Alcohol may be used for legitimate laboratory purposes, such as chemical, biologic, bacteriologic and clinical, provided its use is nonbeverage, and that it is of such nature as effectually to preclude diversion of the alcohol for unauthorized purposes. Applications for permits from laboratories will be treated separately on their merits on account of the varied nature and multiplicity of such laboratories.

Prescribing of Liquor by Physicians.—Physicians who have filed applications on Form 1404 and who obtain permits to prescribe intoxicating liquor may prescribe such liquors for persons on whom they are in attendance, if, after careful physical examination, or in cases in which such examination is impracticable on the best information obtainable, the physician believes that the internal or external use of such liquor as a medicine is necessary, and will afford relief from some known ailment.

No prescription may be for more than is necessary for the person for whom it is prescribed, and in no case shall it exceed one pint in ten days for the same person by one or more physicians.

Physicians are not permitted to write prescriptions for liquor for their own use, or to use any liquor procured on prescriptions written by them. Prescriptions may be filled only by a pharmacist and may not be refilled.

Prescription Blanks.—All prescriptions must be made on Form 1403, and must contain all the data called for. If the physician does not possess any such forms, and delay may result in loss of life or intense suffering, he may prescribe without the use of Form 1403, but his prescription must contain all the information called for. Blank prescriptions on Form 1403, issued by the commissioner in book form, serially numbered, may be procured without cost by any physician holding a permit. Not more than one book shall be issued to a physician at a time.

Prescription blanks are printed with stubs attached, the stub being a duplicate. All prescriptions must be in duplicate, both copies signed by the physician. After the last blank has been used, the book contaning the duplicates must be returned to the director. Any unused, mutilated or defaced blanks must be returned with the book.

In case of prescriptions written on other forms in an emergency, duplicate copies must be returned to the director at the end of the mnoth, Prescription blanks must be used in the order of the serial numbers thereon.

Physicians' Records.—Physicians prescribing intoxicating liquors must keep on Form 1402 an alphabetical record showing every such prescription issued by him, giving the date, the amount and kind of liquor prescribed, the name of the patient, the ailment for which prescribed, the directions, and the amount and frequency of the doses.

Liability.—No special liability is incurred by physicians, hospitals or sanatoriums for special tax for administering intoxicating liquors in cases of emergency.—*Journal A. M. A.,* Jan. 31, 1920.

West Virginia Public Health Council Examination Questions (January, 1920).

Materia Medica and Therapeutics

1. Give the alkaloids of quinine, and what three are identical in their physiological and chemical action.
2. Name six drugs that are frequently employed in medicine that contain large quantities of tannic acid.
3. State the dosage of the following: Tincture of aconite; tincture of belladonna; tincture of colchicum.
4. How would you administer liquor potassi (Fowler's solution) arsenitis to obtain the desired physiological action, and thereby produce a tolerance for same?
5. Mention the conditions which affect the dosage of medicine.
6. What dire results might be produced by the mixing of incompatible chemicals in prescriptions?
7. Describe the action of strychnia upon the sympathetic nervous system.
8. Enumerate the medicinal uses of ipecac.
9. Is ether ever employed as a cardiac stimulant? If so, why?
10. Outline directions and write a prescription for the treatment of chronic dry eczema of the hands.
11. Write a prescription for acute gonorrhea in the male (same to be used as an injection), giving the necessary instructions governing said conditions.
12. Prescribe for a case of acute cystitis in a young unmarried woman. (Two of last three.)

Surgery

1. Classify fractures and give your treatment for a compound comminuted fracture of the upper third of the femur.
2. Classify hernias and give your technique for Bassini's operation for inguinal hernia.
3. What is intussusception? Give symptoms and treatment.
4. Give symptoms and treatment of a fracture at the base of the skull.
5. What is pericarditis and give treatment.
6. Give your treatment for a ruptured bladder.
7. What is a fractured clavicle? Describe in detail how you would treat it.
8. Mention the varieties of club feet.
9. Give the diagnosis of ruptured extrauterine pregnancy.
10. What form of surgery is proctology, and give your technique in operation for external hemorrhoids.
11. Mention the various local anesthetics and give your preference.
12. What is shock and its treatment?

Practice and Pediatrics

1. Give the diagnosis of erysipelas and your method of treatment.
2. Give diagnosis and symptoms of mitral regurgitation.
3. Give the differential diagnosis of acute miliary, tuberculosis and typhoid fever.
4. Give symptoms, cause and treatment of lymphadenitis.
5. Give diagnosis and treatment of scabies.
6. Differentiate smallpox and chickenpox and give the management of each.
7. What symptoms would lead you to suspect a latent case of syphilis?

8. Give your method of feed a three-months-old baby artificially.
9. What is marasmus? Give causes and treatment.
10. Give symptoms, diagnosis and treatment of acute nephritis.
11. Give diagnosis and treatment of pleurisy with effusion.
12. Give the antidote for poisoning from concentrated lye.

Physiology and Histology

1. Describe the nerve supply and the movements of the stomach.
2. Name the chief elements of food and describe their utilization in the body.
3. Give the histological structure of the bladder wall.
4. What sensations are received through the nerves of the skin?
5. Describe the blood plasma. How does it differ from blood serum?
6. What are cilia? Their function and where found?
7. Define: Afferent, efferent, sensory, motor, trophic, inhibitory, and vasomotor, as applied to nerves.
8. Describe the structure of compact bone.
9. What is the function of the adrenal bodies?
10. Describe the histological structure of the pancreas.
11. Discuss the nature and origin of urea.
12. Describe briefly the function of the liver.

Bacteriology and Hygiene

1. Discuss the effects produced by bacterial growth.
2. Name the routes of infection.
3. Describe the Gram method of staining.
4. Discuss the staphylococcus and its pathogenicity for man.
5. Describe the mechanism of immunity.
6. Describe the tubercle bacillus and name its channels of infection.
7. Discuss anaphylaxis.
8. Describe the sanitation of a dairy.
9. Discuss the sanitary privy and its relation to soil pollution.
10. Give the prophylaxis of typhoid fever.
11. Give the prevention of lead poisoning.
12. Describe the sanitation of a rural school.

Eye, Ear, Nose and Throat

1. Give the extrinsic muscles of the eye and uses of each.
2. Give full directions for cleansing an eye in cases of gonorrheal ophthalmia.
3. Give differential diagnosis of glaucoma and iritis.
4. Give causes and treaatment of epistaxis.
5. Give directions for caring for an eye injured with lime.
6. Diagnosis and treatment of ethmoidal sinusitis.
7. Diagnosis and treatment of membranous croup.
8. When should tonsils not be removed and reasons for not removing.
9. Give diagnosis and treatment of peritonsillitis.
10. Give signs and symptoms of beginning acute mastoiditis.
11. Give signs, symptoms and treatment of Vincent's angina.
12. Give causes and treatment of earache.

Obstetrics and Gynecology

1. What bones form the obstetric pelvis?
2. What signs of pregnancy are determined by touch?
3. What are the immediate dangers of abortion?
4. What articles should be carried by the obstetrician?

5. Is it important to make a positive diagnosis of the presentation and position of the fetus before introducing the forceps? If so, why?
6. What are the indications for podalic version?
7. What are the contraindications to a vaginal examination?
8. Discuss drugs having some special action on the pelvic organs.
9. From what should you differentiate pelvic cellulitis?
10. What are the principal displacements of the uterus?
11. Define pruritus vulvae. Give the etiology, symptoms and write a prescription for the treatment.
12. How would you differentiate the fundus uteri from inflammatory deposits in the pouch of Douglass?

Chemistry and Medical Jurisprudence

1. Define chemical affinity, cohesion, and adhesion.
2. What is understood by "valance?" What is the valance of Ca, Na, and K?
3. Distinguish between fermentation and putrefaction.
4. What are the properties of an acid, of an alkali?
5. What is understood by double decomposition?
6. What is the average amount of solids in the urine? How determined?
7. How would you determine if urea or urates are present in excess in the urine?
8. Distinguish between mercurous and mercuric compounds.
9. Classify the ferments found in the body. Name one of each class.
10. Give symptoms and treatment of acute poisoning by salicylic acid and the salicylates.
11. What is rigor mortis? How soon after death does it appear?
12. Define insanity from a medico-legal point of view.

Modern Hygiene.

Defosses publishes in the *Presse medicale* a signed editorial with the heading, "Demagoras, hygieniste." He compares Iatros and Demagoras. Iatros, the physician who has grown old helping the sick; his glory, the gratitude of a few whom he has saved from the tomb. Every day, every hour, he teaches practical hygiene. He is not afraid to tell Demos that many of his ills come from his bad habits; that physiologic poverty comes often from vices; that the best way to keep well is to be clean physically and morally; he tells the young men that the surest way to avoid venereal diseases is to keep from exposing oneself to contagion; he hints to the workman that cirrhosis and dropsy and even tuberculosis are picked up in the barroom (*se prennent sur le zinc*), and that accidents are often the consequence of imprudence or drunkenness. He teaches that progress in hygiene is possible only by individual effort. General measures are effectual only with the active collaboration of the individual. Every man hews out his own destiny. He preaches constantly moderation in eating and in pleasures, and regularity in habits. But Demagoras with his new diploma as hygienist, obtained after a few months in a bacteriologic laboratory and attending a few lectures on hygiene, declares that the sick are the victims of

Society; that diseases are the result of the bad organization of public hygiene. If people are tuberculous, that is because the declaration of tuberculosis has not been made compulsory; how can a disease be combated if its exact prevalence is not known? For from exhorting Demos to lead a more hygienic life, his axiom is that Society is to blame for everything. If the laboring man drinks liquor, it is because he wants to forget; if he is lazy, it is because he does not get enough food. The young man should be able to obey without restraint the desires which Nature has implanted in him. It is for the antivénereal dispensary to render Venus safe and dry Cupid's tears. To establish once for all and absolutely school hygiene, urban hygiene, industrial hygiene, all that is necessary is to have numerous inspectors, well paid. Demagoras speaks with superb disdain of clinicians. He, himself, represents Science. Medicine for the physicians; hygiene for the hygienists. Demos can without fear seek his pleasures; Demagoras will assure him the scientific organization of hygiene. The people thus hear two voices preaching to them: To keep well, develop your individual energy, do not count on any one but yourself, says the physician. To keep well, develop the system of public functionaries, count on me, clamors Demagoras. We may well imagine how puzzling these two tendencies must prove to laymen accustomed to guide themselves by authority, and who under the circumstances cannot determine by themselves which is the correct advice. It would seem, however, that here as elsewhere, the middle of the road would be the safest, and that both individual hygiene and public sanitation must be observed if Society is to secure a maximum of protection against disease.—*A. M. A. Journal.*

Living Expenses for Thirty Years.

There is probably no question today that the average American family views with so much anxious interest as the very practical one of the steadily advancing cost of living. Many discussions appear that take up the topic from various angles. One of the most unique contributions to the general subject appears in the *Outlook,* Dec. 3, 1919. The account given by R. R. R. of his household expenses for the thirty years period from 1889 to 1919 appeals to the reader more than government statistics, as it covers actual family experience and considers two of the elemental factors of human existence—income and outgo. The writer is the head of a family in Massachusetts, and has been railway employee for thirty years. This significant record begins with 1889, the year of his marriage. In that year he introduced in the home the custom that each member of his family who bought an article was to write down the article and its cost on a tally board. Each week he entered these figures in his "house book." He found that his tally board system encouraged economy in his family. Entering everything on the tally board in black and white served to make the matter of making ends meet a sort of game that everybody enjoyed. Would they meet or

would they not meet? was always very much of a question. Some commodities, such as sugar and flour, were actually cheaper in 1899 than in 1889, and even up to 1909 there was not such a tremendous increase; the greatest came during the past ten, and more especially during the past four years. Table 1 well illustrates this.

Table In A Comparison of Prices of Staple Commodities During a Thirty-Year Period (1889-1919).

	Butter. Per lb.		Lard, per lb		Milk, per qt.		Sugar, per lb.		Flour, per bbl.		Potatoes, per bushel		Coal, per Ton
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1889----	$0.34	$0.26	$0.10	$0.09	$0.05	$0.05	$0.07	$0.07	$7.50	$6.50	$0.80	$0.80	$6.00
1899----	0.34	0.25	0.10	0.08	0.06	0.05	0.05	0.05	5.00	4.50	1.00	0.75	6.75
1909----	0.34	0.26	0.16	0.12	0.06	0.06	0.06	0.05	7.00	6.25	1.20	0.75	7.50
1919----	0.80	0.58	0.43	0.32	0.15	0.15	0.11	0.10	14.00	13.00	4.00	1.00	12.65

Eggs have changed more than any other commodity. In 1897 the highest and lowest prices were 36 and 15 cents a dozen, respectively. In 1919 the maximum and minimum were $1.20 and 40 cents. In 1894 and 1895 sugar was only 4 cents. The highest price prevailed in 1919.

It has been a very close race between the advancing prices and the writer's slowly increasing income. However, he has managed, with the aid of a $500 legacy, to buy a home worth $3,000 and to save $1,600 besides. For life insurance about $1,300 has been spent.

Table II—Wage Scale During Thirty-Year Period.

Year	Daily Wage
1889	$1.75
1892	2.30
1895	2.50
1899	2.75
1902	3.00
1907	3.25
1910	3.75
1916	4.50
1918	5.00
1919	5.50

Since 1903 the writer has been employed as a freight conductor on a small nonunionized railway. He concludes with the thought that while he and his family have never had much, they have had enough.

OBITUARIES

Andrus, Duane P.—American Eclectic Medical College, St. Louis, 1883. Died at his home in St. Louis, Mo., December 16, aged sixty-nine.

Barton, W. S.,—Reform Medical College, Macon, Ga., 1860 at Orangeburg, S. C., November 23, aged eighty-one.

Bergmeyer, O. M.—Dayton, Ky., Eclectic Medical College, Cincinnati, 1916. Died at Seton Hospital, November 23, aged thirty-one.

Beck, Oliver M.,—Died at his home in Feesburg, Ohio, October 23, aged eighty-six.

Brothers, Clark Everon—Eclectic Medical Institute, Cincinnati, 1881. Died at his home in East Akron, Ohio, December 2, aged sixty-six.

Clark, E.,—Eclectic Medical Institute, Cincinnati, 1881. Died at his home in East Akron, Ohio, December 2, aged sixty-six.

Cope, J. D.,—American Medical College, Cincinnati, 1882. Died at Negley, Ohio, December 22, aged seventy.

Delay, William, of Rome, Ga., Georgia College of Eclectic Medicine and Surgery, Atlanta, 1881. Died at Selina, Ala., December 7.

Dromgold, Thomas M.,—Eclectic Medical Institute, Cincinnati, 1878. Died at Ottawa, Ill., December 21, aged seventy-one.

Faucher, Newton C.,—Died at Kansas City, Kan., October 20, aged eighty-four.

Geiger, Marion Cooper—Georgia College of Eclectic Medicine and Surgery, Atlanta, 1881. Died at his home in Polytechnic, Texas, December 26, aged sixty-six.

Guglier, August A.,—California Electic Medical College, Los Angeles 1901. Died at his home in Madrona, Calif., November 30 aged sixty.

Haggerty, John E., Jr.—Electic Medical College of the City of New York 1911. Died at his home in New York City, December 18, aged forty-three.

Hale, Elisha Green—Died at his home in Nashville, Arkansas, November, 16, aged eighty-six.

Herring, A. N.,—Electic Medical Institute, Cincinnati 1895. Member of the Ohio State and National Electic Medical Associations, at his home in DeGraff, Ohio, November 17, 1919.

Higgins, Mathhias—American Electic Medical College, Cincinnati 1889, at his home in Newport, Ky., November 4, aged fifty-eight.

Howard, Almauzer Ronelson—Eclectic Medical College, Cincinati, 1878, at Canton, Ill., December 23, aged fifty-nine.

Judd, William H.—Bennett Electic Medical College, Chicago 1883. Died from injuries received through an automobile accident at Jamesville, Wis., October 26, aged sixty-five.

Kent, John F.—Died at his home in Newburg, Ark., November 3, aged forty-eight.

Loder, Franklin.—Indiana Eclectic Medical College, Indianapolis 1890, at Logansport, Ind., December 30, aged fifty-five.

Maynard, Orlando T.,—Eclectic Medical Institute, Cincinnati 1875. Died at his home in Elyria, Ohio, October 24, 1919, aged sixty-nine.

McClanahan, John T.—Eclectic Medical Institute, Cincinnati, 1874, at Boonvillle, Mo., January 1, aged sixty-six.

Pickering, J. C.,—Eclectic Medical College, San Francisco 1893, at San Francisco, November 18, aged fifty-six.

Pixley, E. Simpson—Eclectic Medical College, Philadelphia, 1878, at Pittsburg, Mass., October 12, aged eighty-seven.

Robinson, Edward T.—Bennett Eclectic College, 1906, at Chicago, Ill., aged forty.

Rosendale, Charles R.—Eclectic Medical Institute, Cincinnati, Ohio 1856, at Bowling Green, Ohio, December 15, aged fifty-seven.

Sembower, Ray V.—Eclectic Medical College, Cincinnati, 1917. At his home in Connellsville, Pa., November 15.

Smith, Alexander Campbell—Indiana Eclectic Medical College. Member of the Indiana State Society, at his home in Indianapolis, Ind., November 22, aged seventy-one.

Smith, Daniel G.—American Eclectic College, St. Louis 1877. Died at Arkoe, Mo., October 14, aged seventy-two.

SECTION OFFICERS OF THE N. E. M. A.

Below is a tentative list of Section officers. We hope they will get busy and arrange a good program for our 1920 meeting:

Practice of Medicine.—Chairman, Dr. J. H. Goss, Jr., Decatur, Ala.; Vice Chairman, Dr. H. T. Webster, Oakland, Cal.; Secretary, Dr. C. H. murphy, Lansing, Mich.

Surgery.—Chairman, Dr. E. B. Shewman, Cincinnati, Ohio; Vice Chairman, Dr. Wilmeth, Lincoln, Nebr.; Dr. Thomas, Washington, Pa.; Secretary, J. S. Hull, Hicksville, O.

Pharmacology, Materia Medica and Therapeutics.—Chairman, Dr. R. J. Lambert, St. Charles, Ill.; Vice Chairman, Dr. H. W. Felter, Cincinnati, Ohio; Secretary, Dr. M. M. Harvill, Nashville, Tenn.

Mental and Nervous Diseases.—Chairman, Dr. W. E. Postle, Columbus, Ohio; Vice Chairman, Dr. F. S. Peck, Oklahoma City, Okla.; Secretary, Dr. T. D. Adlerman, Brooklyn, N. Y.

Diseases of Women and Gynecology.—Chairman, Dr. X. R. Hauss, Sellsburg, Ind.; Vice Chairman, Dr. Ethel Richardson, Kuincy, Ill.; Secretary, Dr. J. E. Holman, Indianapolis, Ind.

Eye, Ear, Nose and Throat.—Chairman, Dr. Dan H. Griffith, Atlanta, Ga.; Vice Chairman, Dr. Z. L. Baldwin, Kalamazoo, Mich.; Secretary, Dr. J. P. Harbert, Bellfontaine, O.

Diseases of Children.—Chairman, Dr. C. A. Tindall, Shelbyville, Ind.; Vice Chairman, Dr. Nannie M. Glenn, State College, Penn.; Secretary, Dr. Frank P. Davis, Enid, Okla.

Hotels, Place of Meeting, and Entertainment.—Chairman, Dr. Samuel Green, Atlanta, Ga. Assistants to be chosen by Dr. Green.

New Applications for Membership—Dec. 1, 1919, to March 1, 1920.

Texas.—Prideaux, R. O. Farmer.

New York.—Hobbie, J. Albert.

Massachusetts.—Cohen, Abraham, Springfield.

AMERICAN RED CROSS NOTES.

Typhus Treatens the United States.

Unless the spread of the disease in Poland can be checked, there is a risk that a very serious epidemic of typhus will visit that country this winter, according to the report of the medical commission which the League of Red Cross Societies sent there this fall to investigate conditions. Great effort, therefore, is needed, not only to save the inhabitants of Poland itself, but also in the interest of western Europe and America, for it is within the bounds of possibility that a general epidemic may spread westward.

In Kalisz, Poland, alone from January 1st to July 27th of the present year there were 124,000 typhus cases; and even during the summer and early fall the epideic continued. The most urgent present needs, the commission found, are large quantities of soap, underclothing, blankets, hospital equipment and utensils, and drugs, especially salvarsan—for use in relapsing fever—castor oil, iodides, salol, quinine and opium. Many of the hospitals are wholly without bed sheeting or blankets, and at present there is an average of only one physician to every 10,000 inhabitants.

The American Red Cross, with an appropriation of $2,000,000 as a starter and a commission of over one hundred persons already at work, is preparing to carry on in thorough fashion during the winter, the work of bringing relief to the destitute people of Poland, and of fighting the epidemics, which it started last spring.

Army Base Hospitals to Be Held Intact.

In accordance with the wishes of the military authorities and as part of the peace program of the American Red Cross, Base Hospitals organized by the Red Cross for the Army, and which saw war service, will be held intact against future emergencies. War may never again visit this country, it is true, but there are the great disasters of peace—floods, earthquakes, epidemics—which might require immediate facilities, such as only could be supplied by a carefully organized and equipped system of base hospitals, which the Red Cross has as a legacy from its war experience.

These fifty base hospitals are located at important points through the country, and their personnel recruited from the staffs of the hospitals in their vicinity. As a result of their war service, the doctors and nurses are incomparably well fitted to undertake such emergency tasks, and virtually, in all cases are being kept enrolled for duty when needed.

The army is cooperating with the Red Cross by providing each base hospital with a unit of equipment in accordance with military standards, stored in a government storehouse as near as possible to the city in which the base hospital is situated. Red Cross Chapters, also, are assisting in the reorganization of the base hospitals for peace times, and will cooperate when base hospitals may be called for emergency service.

ECLECTIC MEMBERS OF STATE MEDICAL BOARDS.

Arizona _____*W. H. Sargent, Phoenix (Bennett '05).
Arkansas _____*R. M. Jernigan, Rector.
(Separate Bd.)___E. L. Sullivan, Poughkeepsie (Ga. '09).
C. E. Laws, Secretary, Ft. Smith (Bennett '03).
L. Gardner, Atkins.
W. V. Dallenbaugh, Pine Bluff (E. M. C. '81).
Pearl H. Tatman, Eureka Springs (Amer. St. L. '99).
California _____H. V. Brown, Glendale (Cal. '02).
Connecticut _____John W. Fyfe, Saugatuck (N. Y. Ec. '87).
(Separate Bd.)___E. A. Markham, Durham (N. Y. Ec. '77).
E. H. Marsh, Mansfield Centre (E. M. C. '81).
Jas. E. Hair, Bridgeport.
Dist. Columbia__*L. D. Walter, 1334 G Street, N. E., Washington, D. C.
Florida (Sep.)____G. A. Munch, Secretary, 1806 Franklin St., Tampa (E. M. C. '91).
Georgia _____A. F. White, Flovilla (Ga. '92).
O. B. Walker, Bowman (Ga. '93).
A. F. Fleming, Waycross (Ga. '94).
Idaho _____J. J. Herrington, Moscow (E. M. C. '93).
Indiana _____M. S. Canfield, Frankfort (E. M. C. '73).
Iowa _____Geo. F. Severs, Centreville (E. M. C. '80).
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G. R. Dean, McPherson (Amer. St. L. '92).
Kentucky _____Geo. T. Fuller, Mayfield (E. M. C. '89).
Massachusetts ___A. L. Chase, Randolph (E. M. C. '72).
Michigan _____*Nelson McLaughlin, Lake Odessa (E. M. C. '07).
A. L. Robinson, Allegan (Bennett '02).
Missouri _____T. A. Son, Bonne Terre (Amer. St. L. '99).
Nebraska _____*Hall H. Humphrey, Daykin (Cotner '13).
Nevada _____*S. L. Lee, Secretary, Carson City (Phys. Med. Cin. '70).
New Jersey _____D. P. Borden, Paterson (N. Y. Ecl. '72).
New York _____Earl H. King, Saratoga Springs (N. Y. Ecl. '98).
Ohio _____S. M. Sherman, Columbus (E. M. C. '75).
J. K. Scudder, Cincinnati (E. M. C. '88).
Oklahoma _____W. T. Ray, Gould (E. M. C. '92).
Oregon _____U. C. Coe, President, 1208 Stevens Bldg., Portland (E. M. C. '04).
Pennsylvania ____C. L. Johnstonbaugh, Bethlehem (E. M. C. '87).
Tennessee _____B. L. Simmons, 309 Jackson Bldg., Nashville (Ga. '90).
Texas _____M. F. Bettencourt, Secretary, Mart. (E. M. C. '06).
Utah _____C. L. Olsen, 932 S. 5th St., East, Salt Lake City (E M. C. '98).
Vermont _____P. L. Templeton, Montpelier (U. S. N. Y. Ecl. '82).
A. E. Parlin, Island Pond.
West Virginia __*H. E. Sloan, Clarksburg (E. M. C. '98).
Wisconsin _____*F. C. Haney, Watertown (Bennett '07).
R. C. Rodecker, Holcomb (Bennett '98).

Please report any changes, errors or additions promptly to J. K. Scudder, National Chairman, Committee on Medical Legislation, 630 West Sixth St., Cincinnati, O.

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*Not members of the National Eclectic Medical Association.

LIBRADOL

[IN TREATMENT OF PNEUMONIA AND RESPIRATORY DISEASES]

BY RICHARD JAY LAMBERT, Ph.G. M.D.

ST. CHARLES, ILL.

First.—Question—When should libradol be applied?
In my opinion libradol green should be applied wherever there is congestion and inflammation, especially at the first suggestion of any inflammation of the lungs.

Second.—Question—What should be the size of the libradol plaster and where should it be applied?
In applying libradol be sure to make the plaster large enough to extend beyond the area of inflammation. The plaster should be about an eighth of an inch thick. In the homes I give instruction to spread the plaster as they do a thick covering of butter; to be sure to make the plaster large enough, and apply it as hot as can be borne by the patient. A small plaster will not quickly give the desired action.

Third.—Question—How long should the libradol plaster be left in place?
When libradol is applied it should be left in place for twenty-four hours, unless it becomes dry and crumbles, in which it should be replaced by a fresh plaster. Before applying the plaster the skin should be bathed with water and soap, and (if alcohol is convenient) rubbed with alcohol and dried.

Fourth.—Question—After the full action of the libradol is obtained and relief has followed what shall then be done?
After the plaster is removed the parts should be bathed with warm water and soap, rubbed with alcohol, (if it be convenient), then a plaster of libradol mild applied the same as the libradol green for a few days.

Fifth.—Question—What about children and super-sensitive persons?
In some cases nausea and vomiting is produced a short time after the libradol is applied. In the majority of cases all that is necessary is to remove the plaster for a few minutes, then replace it. Occasionally we find young children or super-sensitive people who cannot tolerate the action of libradol. In these cases libradol mild may be used with success.

Sixth.—Question—What about internal indication?
Libradol is an aid in the treatment of pneumonia and other respiratory diseases, but should not be depended on to the exclusion of internal medication. It is of the greatest service when used in conjunction with the proper internal treatment. In all cases specific indications call for certain remedies which should be given internally. Caution should be used in giving sanguinaria and lobelia internally when using libradol, as nausea may be produced.

Seventh.—Question—What about pneumonia following influenza?
Libradol is one of the first remedies to think of in influenza. I use it before there is any indication of pneumonia, applying it well up over the bronchial tubes. I feel that if properly applied, it will prevent pneumonia following influenza in the majority of cases. In a general practice covering nearly twelve years, I treated several hundred cases of pneumonia without a single death. My first deaths from pneumonia followed the recent epidemic of influenza, but in each case the pneumonia was well developed before I commenced treatment. In practically every case of pneumonia I use libradol, and do not worry about the outcome if I am called to the patient in the early stages. I have supervised the use of over five hundred pounds of libradol, and it would be very hard to estimate the very large quantity that has been used on my recommendation. I purchase it in the large hospital size for use in the Fox River Sanitarium, and use at least one jar a month.

READING NOTICES.

Class and Clinic in Orificial Surgery.

At the solicitation of a number of doctors, B. E. Dawson, A.M., M.D., Ch.M., F.S.Sc. Lond.), will hold another class and clinic in Kansas City, Mo., at Grace Hospital, April 26 to 30 inclusive.

Some new methods of diagnosis and therapeutic measures will be demonstrated. Clinic free to patients of members of the class, except hospital service. Tuition, $50.00.

Write for particulars to Dr. B. E. Dawson, 3110 Charlotte Street, Kansas City, Mo.

In an age when the written word runs into millions every year, fearless, indeed, is the writer who dares to produce "mere words." To hold a reading audience, facts and facts only are an essential, and the portrayer of facts is the popular author of the day.

The physician, in his ever constant search for additional knowledge, is entitled to the best there is, and with this end in view a brochure, "The Pneumonic Lung," has been published, in the belief that therein the discriminating physician will find some facts which will aid him in the pursuit of his professional duties. The text matter of this booklet is the result of long and exhaustive study of the literature on pneumonia in its different phases, and in its preparation the works of practically every standard author who has discussed internal medicine have been consulted. The clinical records of hospitals have been a source of information and confirmation; the most recent discussions on pneumonia in American, British and French medical journals have been perused, and no field which would yield information has been left untilled.

The illustrations have been painted especially for the accompanying text. The subject has been given the closest attention and study, and no opportunity has been neglected to attain the close pathological and anatomical touch so essential in bringing out the necessary details, thus adding to their practical value. Expense has been no factor in the production of this brochure. With the object of presenting to physicians a booklet which would refresh their knowledge of the etiology, pathology, symptomatology and treatment of a most destructive disease, and in order that they might constantly have at their elbows an authoritative and most practical exposition of the subject, the authors have gone deeply into the matter.

Physicians may obtain, without expense to them, a copy of this interesting booklet by addressing The Denver Chemical Mfg. Co., 20-24 Grand St., New York City, N. Y.

Plant Drugs Vs. Kaolin.—Every now and then we are brought face to face with the fact that plant drugs are growing steadily in favor. Not so very long ago, when the doctor felt the need of an antiphlogistic he thought

of Kaolin, combined with glycerin. That was because there wasn't much else to think of for this purpose, but now his first thought, if he is the usual progressive physician, is of Diaplasma, a Merrell product, prepared from well known plant drugs, which is not only a superior antiphlogistic but a local anodyne as well. Diaplasma has the advantage of being usuable as an inunction, if desired, thus permitting its virtues to be more completely absorbed by the tissues than a mere external dressing. It is not a new product by any means, and is known to most of the wide-awake practitioners as a valuable combination of therapeutic agents in croup, threatened pneumonia, pleurisy, lumbago, rheumatism, sprains, aching and stiff muscles, joint injuries, etc. The poduct is obtainable through the leading drug stores and is put up in convenient collapsible tubes and one-pound jars. It has become a real "stand-by" among the doctors for a wide range of winter ills.

An Unusual Booklet.—A new and very attractive booklet on "Influenza, Colds and Catarrh" has recently come to our notice. It presents in concise, readable form some interesting facts regarding the history and etiology of the disease, and also regarding preventive and curative treatemnt, with hints as to dosage, etc.

This booklet may be read with profit by every physician and druggist in the country. Typographically it is exceptionally good, and the illustrations are interesting. Copies may be obtained free of charge by writing to H. K. Mulford Company, Philadelphia, Pa.

Viburnum.—"This old and well-known indigenous plant affords a frequently indicated medicament. It exerts a positive action of a soothing and quieting character upon the nervous system, and promptly relieves many cases of nervous excitement. In nervous states, when the patient complains of moderate pain and restlessness as a prominent cause of suffering, it should constitute a part of the treatment. Viburnum is a useful remedy in many wrongs of the reproductive organs, and is especially valuable as a means of lessening nervous excitement in abnormal conditions of the uterus. In dysmenorrhea, whether the flow is scant or profuse, it exerts a relieving influence, and is especially needed in cases in which the discharge is membranous. Amenorrhea and menorrhagia also come within the range of the curative action of this energetic remedy. Viburnum constitutes an excellent medicament in almost every form of ovarian irritation. Acting as a uterine tonic, it restores normal innervation, improves the circulation, and corrects faulty nutrition of the uterus and ovaries. In pregnancy its tonic influence has often proved of much value, and has long been employed as a remedy in

habitual abortion, with satisfactory results. In order to obtain the most beneficial influence of the drug in these cases, small doses of the remedy should be given from soon after conception until the end of the fifth month of pregnancy. In after-pains its action is modifying in character, and in chlorosis, chorea and hysteria, when associated with uterine irritation, it is an efficient remedial agent."

The above statement from *The Eclectic Medical Review* of Dec. 15, is most heartily endorsed. For nearly half a century, by sheer force of therapeutic worth as a dependable remedy in gynecological and obstetrical work, Hayden's Viburnum Compound has maintained professional esteem and confidence. In this day of therapeutic nihilism and substitution of standard remedies, this worth while considering.

The Headache and Sleeplessness of Infections.—Among the disagreeable symptoms of influenza and other infections, headache and sleeplessness often demand that the physician use some agent to bring about prompt relief. He hesitates to use opiates or agents that have a depressing influence, and may with difficulty hit upon a therapeutic agent that will give relief and yet be safe.

It is in ust such conditions that Pasadyne (Paniel) shows its beneficient effects. While possessing sedative powers, Pasadyne (Daniel) is not depressing and does not produce habit-formation. With it he can secure rest and give the patient relief from the distressing headache so often a symptom of influenza and other infections.

Pasadyne (Daniel) is merely a concentrated tincture of passiflora incarnata. A sample bottle may had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Ga.

Cod Liver Oil After Influenza.—As an agent for restoring bodily strength to the patient recovering from influenza, cod liver oil occupies a popular place in the estimation of most physicians.

These patients usually are much reduced in resistance and are an easy prey to pneumonia or tuberculosis. During their period of convalescence cod liver oil in some palatable form should be administered, and for the purpose Cord. Ext. Ol. Morrhuae Comp. (Hagee) will meet the demands made upon it.

In many instances the digestive organs of these patients are easily upset, and care should be exercised to choose a palatable preparation of cod liver oil. While Cord. Ext. Ol. Morrhuae (Hagee) possesses the therapeutic and reconstructive properties of the plain oil, its marked palatability gives it a decided advantage over preparations not so agreeable and acceptable. Many physicians use it as a routine reconstructive in the convalescence from influenza.

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POST-OPERATIVE COMPLICATIONS.

W. R. Schussler, M.D., Orland, Ill.

The title of my paper covers so great a territory that a word of explanation is necessary. To cover all treatments of complications arising during and after operations would require many thousand words. I therefore will endeavor in this paper to cover and outline the principal points which commonly arise after surgical operations.

In classifying the complications most commonly met with, they may be enumerated as follows:

1. Complications arising as the result of the anesthetic during the operation.
2. Hemorrhage during operation.
3. Hemorrhage following an operation.
4. Gastric complications.
5. Shock and collapse.
6. Ether pneumonia and pulmonary complications.
7. Cardiac complications.
8. Post-operative peritonitis.
9. Circulatory complications (air embolism, thrombosis, etc.).

(1) In regard to complications arising as a result of the anesthetic during operations, it is always a source of worry to a surgeon when he is not quite confident that the anesthetist is capable and has had extensive experience in this line of work. Many times the surgeon is called upon to perform operations which require general anesthetics and is obliged to depend upon the services of some one who is inexperienced in this line of work. I recently entered an operating room where a physician was reducing a simple luxation of the elbow and found the patient had ceased breathing. His face was an ashy pale color and he was pulseless. Both the physician and the nurse, who was inexperienced in giving anesthetics, became excited and the doctor called upon me to assist in bring about restitution. Artificial respiration appeared to be of little avail. I seized the patient by the knees and elevated him into the air and swung him with his head down, as one does in resuscitating a child when it does not breathe immediately after birth. Strychnine was given hypodermically and the little fellow began to breathe. You can imagine the relief that came to all implicated in this

matter. This trouble was caused by crowding the anesthetic, which in this case was chloroform. I have seen in many instances cases in which the anesthetist would overcrowd the anesthetic and very often bring about a condition of ether narcosis.

In regard to the skill which is required in putting patients to sleep under a general anesthetic, it is of vital importance that the anesthetist observe the function of three vital organs, namely, the brain, the heart and the lungs. The fatal results which usually occur from the administration of a general anesthetic are due to overanesthesia. In operations which require complete relaxation, such as laparotomies, removing of tonsils and others, it is necessary that the anesthetic be crowded to a point of complete relaxation but no further. If the anesthetic is crowded beyond this point, syncope and death will result, and if either one of the vital organs mentioned above ceases to functionate it means death. The person who is experienced in giving anesthetics is very careful after the point of complete relaxation has been obtained, not to crowd the anesthetic further, but to only give it in quantities sufficient to keep the patient under relaxation, which is always secondary to sleep.

The treatment briefly is as follows; in case of syncope due to cardiac paralysis, immediate removal of the ether mask, lowering the head and elevating the feet, artificial respiration, hypodermic use of strychnine, nitroglycerine or spirits of camphor. In cases of cardiac paralysis, the danger is much more grave and the hope of restoration much more remote than in cases of asphyxia due to etherization of the lungs. In cases of cardiac paralysis, the patient succumbs to collapse and syncope suddenly.

In conditions where the lung is involved the immediate danger is not so great and resuscitation is much easier effected.

In addition to what has been mentioned, if the patient is able to be swung with the head down, as in cases of children, it can be brought about more quickly; if not simply lower the head by tilting the operating table. In many instances the operation is performed upon a bed or table which cannot be lowered and one is then required to lower the head by other means.

(2) In reference to hemorrhage which occurs at the time of the operation, one may say that many times this is due to carelessness of the operator in severing important blood vessels in the locations where ligation is difficult, or in tearing parts where the blood vessels will recede in the soft tissues and can not be grasped with the hemostat so as to check the hemorrhage. It is a good plan for the surgeon to ligate the blood vessels before they are severed. When this accident occurs, the first step for the surgeon is to follow the blood, detect the seat of hemorrhage and clamp the artery. If there are more than one bleeding at the same time, which is very often the case, the severed vessels should be located, clasped with hemostat and ligated.

There should be a sufficient number of hot lap sponges in all cases where there is liability to be hemorrhages. They can be firmly inserted into the cavity where the blood comes from, compressed, removed quickly and

the source of the hemorrhage detected and clamped with the forceps. The hemorrhage during the operation is sometimes so severe as to produce acute anemia, syncope and death. In these cases the step of treatment would be as follows:

1. By all means check the hemorrhage in the way outlined above.
2. If necessary reduce anesthetic.
3. Give hypodermoclysis of normal salt solution quickly and as soon as practical an intravenous of normal salt.

Finish the operation as quickly as possible, if it can be accomplished. Place the patient in a bed with the feet elevated and apply heat to the body and feet. Continue intravenous or hypodermoclysis until the circulation is restored and the patient becomes conscious.

(3) Secondary hemorrhage or hemorrhage following an operation. Usually after the patient has been placed in bed, should be treated in very much the same manner as hemorrhage during an operation, namely, the first step is to check the hemorrhage by whatever means may be most practical. If there is a secondary hemorrhage following a laparotomy and the loss of blood is so great as to cause acute anemia, it is necessary to open the wound quickly, find the bleeding blood vessels and ligate them. At the same time carry out the intravenous of normal salt or hypodermoclysis first and later on if necessary a transfusion of human arterial blood.

(4) Gastric complications are usually very annoying and worrysome to the surgeon. As a preventative, I would suggest that the patient be prepared as follows for an operation in which a general anesthetic is to be employed. The patient should be placed in bed the day before the operation, a saline cathartic should be administered the evening before the operation. The large intestines should be thoroughly flushed. The patient should not partake of food after the laxative has been administered. After the operation there should be no water or fluids taken into the stomach for eight hours. If this method is followed there is usually very little nausea and vomiting. Nausea and vomiting is overcome by administering small doses of bismuth sub-nitrate, gelsemium or aconite and if necessary small doses of morphia sulphate given hypodermically will allay irritation and the patient will rest better and will sometimes be relieved of annoying complications by the administering of small doses of gelsemium, which produces quiet, rest and sleep and prevents infections and complications and the agent acts nicely upon the kidneys and circulation.

(5) In reference to shock and collapse which is caused by prolonged operations, loss of blood, and also the narcotic effect of the anesthetic as well as the weakened condition of the patient following disease and injury. The chief symptoms being marked pallor and coldness of the skin and visible mucous membrane. Small, irregular, rapid pulse, stuporous or apathetic appearance of the patient.

The treatment of these cases would be cessation of the anesthetic, opening of the windows to permit sufficient air, hypodermic stimulation. When due to hemorrhage, an intravenous of normal salt or blood when practical

or hypodermoclysis of normal salt solution, application of warmth. Many surgeons advise the use of morphine hypodermically in the treatment of shock. If the patient can swallow, warm stimulating drinks such as strong coffee, wine or whisky and water as hot as can be taken, may be given.

(6) Referring to ether pneumonia which in many cases is due to the irritating effect of the sulphuric acid contained in the ether given at a time when there is hyperemia or congestion of the bronchial tubes or air vesicles of the lungs. It becomes the duty of the surgeon to assist nature in overcoming this very common post-operative complication.

The treatment followed by the writer may be outlined in this manner. The patient is placed in a well ventilated room with temperature of about 68 or 70, in a comfortable bed, a pneumonia jacket is applied to the chest, and the patient is given light and digestable diet and all source of noise or irritating surroundings avoided.

The remedial agents usually employed are veratrum given in small doses often repeated in case the patient is an adult. I usually give the following mixture; Lloyds Specific Veratrum, minims 12 to 15, water 4 ounces, one dram every hour. If the temperature is not high and there is considerable of moisture as shown by mucous rales, the patient receives small doses of belladonna, given until the physiological action is obtained. In case there is a septic condition as indicated by the tongue, Lloyd's echinacea is administered from 3 to 7 drop doses every 2 or 3 hours. After the inflammatory action has subsided and the patient is in the stage of exhaustion, stimulants and tonics are given as indicated.

In these cases the Eclectic methods bring forth the fruits of success which have been so conspicuous in our recent epidemic of pneumonia following influenza.

(7) In reference to cardiac complications, it is difficult to outline a method of treatment which will apply in all cases, but as an Eclectic, I select such remedies as may be indicated in the individual case. Inflammatory conditions of the serous lining membrane of the heart and its valves are treated as inflammatory conditions of serous membranes elsewhere in the body. Complete rest with the usual careful nursing and such remedies as aconite, veratrum, gelsemium and bryonia, will have a tendency to overcome the inflammatory action and these should be followed by such heart tonics as digitalis, cactus, crataegus and caffeine, and if necessary heart stimulants may be employed.

I would like to state here that a great deal of harm is very often caused by the excessive administration of drugs which have a tendency to destroy the function of digestion and assimilation of the stomach and intestines. I have always obtained better results by withholding a drug which might produce indigestion and replacing it by some remedy which would have a kindly effect upon the action of the stomach, and thereby increase the strength and vitality of the patient.

(8) Post-operative peritonitis is an unfortunate complication and very often proves fatal. In reference to the medical treatment of general periton-

itis resulting from an infection following an operation, the treatment consists in applying, if advisable, hot turpentine stupes and the internal administration of sedatives. In case the inflammatory action becomes localized and results in abcess formation, and there is sufficient vitality, the patient may be operated and the pus drained from this cavity. These cases are very grave and the mortality is high and I am pleased to say that they very rarely occur.

(9) In regard to circulatory complications, thrombosis and embolism which may be met with occasionally. Perhaps less than 1 per cent. of all complications could be considered as a fair estimate for them, yet they do occur, and it is well for the surgeon to be prepared to properly treat these complications when they do arise.

In the non-suppurative type of post-operative thrombosis, which is most common following operations for appendicitis, hernia, salpingitis and pelvic operations, gangrene of the affected site seldom occurs. In the majority of cases the mesentery or pelvic veins or others of the abdominal wall are affected. Pulmonary embolism or cerebral embolism may occur.

The treatment of these cases depends upon the location and should be carried out in accordance with ordinary indications. In cases where the complication is an air embolism the symptom immediately becomes very grave, and death frequently results, especially if the embolism is a large one so as to allow sufficient expansion and contraction and thereby prevent the circulation in the auricles and ventricles of the heart.

DISCUSSION.

Dr. F. L. Wilmeth (Lincoln, Nebraska): I do not know of any literature on the complications of surgery, and as the doctor well stated, to cover the complications that might occur would require several text-books. It is oftentimes difficult to arrive at what are remote or immediate complications, and the rule I have adopted with relation to this is one I learned from Dr. Scudder, and that is, arrive at what you consider the basic lesion, and the other things will be complications. I have seen instances where complications were treated without regard to the basic lesion, and there are complications which are the result, not of surgery, and not even connected with operative work, but those which occur as a result of disease.

The doctor spoke of the anesthetist. I have long since realized that the patient has a right to a competent anesthetist as well as a competent surgeon, and that would eliminate a great many complications. Personally, my preference has been for chloroform, possibly for the reason that I have never lost a patient with chloroform. I have had something like four thousand cases without any loss, and I attribute this to the fact that I have insisted at all times on a competent anesthetist.

Munyon mentions among the complications of surgery, pneumonia. Personally, this has not been my experience. It is said to be due to excessive secretion of the bronchi and reabsorption while the patient is under the anesthetic. This, however, has not been my experience, and I do not

think it will be of other surgeons who have competent persons to administer the anesthetic. I believe the complications we usually find, such as infection, or secondary or primary hemorrhage, are not the result of incompetence, but the result of disease tissue. Where there has been a long continued suppurative process, drainage is sometimes difficult. The drainage tube, whatever style you use, is sufficient to erode the tissues to such a degree that when it is in close contact with a pulsating blood vessel it will very likely rupture and cause secondary hemorrhage. I have had some serious trouble with this, but have had very few cases of primary hemorrhage of serious character.

Shock is almost obsolete. I have not seen an instance for a long time. A prolonged anesthesia, which is mentioned as one of the causes of shock, is not the fault of the anesthetist. A prolonged anesthetic is necessary in a prolonged operation, and we can not blame the anesthetist for that. We could, however, take more care in preparing the patient, but for the fact that they will not allow it.

The doctor mentioned the method of resuscitation from shock. It has long been understood that shock is cerebral anemia, and that lifting the extremities or lowering the head of the patient will assist, by force of gravity, in supplying the cerebral centers with blood. It is more easily accomplished than by stimulants.

I want to speak of one remedy the doctor has mentioned. I hope he does not use it much. That is strychnia. Scudder told us that this remedy acts particularly on the lower spinal nervous system. We know it does, and that about the tenth or twelfth dorsal verebra is the location. In my judgment it would require a very large dose of strychnia to produce any stimulation on the heart, and we have other and better remedies in atropin and adrenalin, and in the use of normal salt, in addition to the position of the patient. I rarely use strychnia any more as a stimulant of the heart.

The discomforts following a surgical operation I would not classify as complications, that is, gas pains, nausea, vomiting, aching in the back, or the feeling of oppression in the chest. When a patient undergoes a major operation you expect these discomforts. Personally, I have taken instructions from a good many people as to how to give the anesthetic so there would be no nausea or vomiting or gas pains—but I have the same old results. But I would not call these complications, they are discomforts. It has been my experience that real complications in surgery are those that have been there at the time surgical procedure was instituted, and are complications of disease, not of the surgical operation. A surgical operation, in the hands of a competent team, is not dangerous; the disease for which the operation is done may be dangerous. I believe a surgical operation is as specifically indicated as aconite or belladonna or gelsemium, and when the symptoms occur which I mentioned a moment ago, that is, nausea and vomiting, I have found no better remedy than to advise the nurse to give the patient about six or eight ounces of water as soon as she recovers sufficiently from the operation to swallow. It allays nausea and vomiting as

nothing else will do. The indicated remedies will act just as successfully and be as gratifying to the surgeon and patient, as in any other character of disease.

Dr. S. O. Barwick (Elkhart, Indiana): There is no question but what the anesthetic has as much to do with the patient undergoing a major operation as the operation itself. If you take into consideration the pre-operative preparation, diet and lack of fluids and pathologic condition present, you recognize that all this produces a cell destruction. There is greater cell destruction than cell reconstruction at this time, consequently while the anesthetic is being administered the patient is undergoing cell destruction, not only of tissue, but the nervous system as well, consequently there is an increased acidity, an acidosis. The man who is giving the anesthetic has as much to do as the surgeon; he has a work to perform and he should perform it. He should take seven to fourteen minutes for the induction, and during that time avoid excitement. As soon as you get into the stage of maintenance, then you want to get busy. No man has a right to give an anesthetic unless he puts his watch right at the head of the patient where he can see it, and in place of trying to learn surgery or talking to the nurses, after you get the patient ready for the knife the next thing is to watch your patient, watch the breathing. Do not attempt to give an anesthetic except with your eye on the minute hand of your watch. When the breathing gets to 50 or 60, you must be cautious.

Dr. B. E. Dawson: I want to give you some remedies in narcosis. Lloyd's subculoyd lobelia—inject two or three c. c. hypodermically. I have never seen anything like it, either in syncope or asphyxia. Another thing—the best thing, I think—is to dilate the rectum, and you get results that you do not get from any other source. Another thing is Dr. Pratt's hot water plug. Put that into the rectum and have one tube from your irrigator to the inflow pipe and another to the basin under the operating table; you get dilatation and heat at the same time. Nothing will clear up a lung like hot water, and resuscitate the patient.

In regard to fluids, I do not agree with the doctor when he says the patient should have no fluids. I very often give the patient a glass of water after she is on the operating table. I find it dilutes the bile in the stomach and they are not so thirsty afterwards. I have had some very happy results simply from letting them drink a glass of water before commencing the anesthetic.

As for gas pains, I give one c. c. pituitrin every three hours. That starts peristalsis and the gas is expelled.

Dr. W. N. Mundy: I am not a surgeon, but I have been giving anesthetics for forty years, and my preference has always been for chloroform. Nowadays the young surgeons prefer ether, and so I have been giving ether, no matter what my preference is. I believe that as a rule the anesthetic is crowded too fast, and that is the reason you have trouble. The anesthetist has no business to watch the operation; his business is to watch his patient, and usually when the surgeon has finished my patient is out from

under the influence of the anesthetic. I have had them wake up on the table before being removed to the bed. I pay no attention to the surgeon; my business is to give the anesthetic. I use the drop method and watch my patient's pulse, watch the respiration, and give the anesthetic gently and slowly. I never say to the patient, "Breathe deep," or "Take a full breath." I say, "keep quiet and breathe naturally."

I want to ask the surgeons here if they study the blood pressure prior to an operation? Do you ever take the blood pressure? It is not the systolic nor the diastolic that counts; it is the pulse ratio. We have exploded long ago the idea of a patient having a high blood pressure. The diastolic pressure is the thing to watch, not the systolic. If a patient has a good pulse pressure it does not make any difference what his blood pressure is. If the pulse is 40 and the diastolic is 80, the patient has a ratio of one-half, and is a good, operable patient. But I do not think there is anything so misunderstood and over-worked as blood pressure.

Dr. O. S. Coffin (Indianapolis): There are two points that have been brought out that particularly attracted my attention, and I want to tell you a little experience I have had that may be of value. When Doctor Mundy mentions the amount of anesthetic, I think he is absolutely right. Many people push the anesthetic too fast and give too much. I have not given as many anesthetics as Doctor Mundy, but I never had any trouble with the anesthetic. My patients frequently come out from the influence before they are ready to take them off the table.

Another thing is the remark made about subculoyd lobelia in narcosis. I want to cite an experience I had when I was a young man, over thirty years ago, in giving lobelia to the wife of an old allopathic physician who was having what we termed at that time a "congestive chill." She was very ill and the doctor had given her everything he knew, and she seemed to be going down. Although he knew I was an Eclectic, I was close to home and so he sent for me. I went over and saw at a glance what the trouble was and asked what he had done. I asked for a cup of hot water and put in it two drams of specific lobelia, and commenced giving it to her every fifteen minutes. Within thirty minutes she was a natural color, she began to feel better. The doctor turned to me and said, "What on earth is that you have given her? it acts so quickly and beautifully." I said "That is lobelia." "I don't know anything about that." I said "That is because you are not an Eclectic." But I have given this a number of times in cases of cyanosis, and have never had a failure. It acts promptly and beautifully and I can recommend it to you.

Dr. S. M. Sherman (Columbus, Ohio): We have heard that ether is safer than chloroform, but I would not state that as my opinion, because in between four and five thousand administrations of chloroform I have not had a death. Twice, through the carelessness of an assistant, I have come near it with children, but the inversion of the body and striking the chest revived both of them. I believe when you consider pneumonia you have more deaths from ether than from chloroform. Giving it carefully and

gradually, I have been able to maintain anesthesia for quite a while without any bad effects. That has been my experience.

Dr. T. L. Brunk (Alton, Illinois): I have seen a number of operations where the patient was laid on his back, the chloroform administered and the operation begun. Dr. Pinchon introduced a better system of placing the patient in the arms of an assistant and using about one dram of ethyl bromide. This gives a nice anesthetic and the patient recovers very quickly. The minute the operation is done, throw the patient forward; the respiration is through the nose and mouth. There is no chance for anything getting into the lung. I do not like to see any one doing an operation with the patient on his back.

Dr. O. C. Baird (Chanute, Kansas): It is said the three greatest inventions for the physician are the clinical thermometer, the kinetoscope, and the blood pressure instrument. I have never had anything that would give such a sure index in the case of an operation as the blood pressure instrument. Whatever the doctors say as to a man's chances for life, it is a good thing to use in the administration of an anesthetic. I think we do no harm by getting all the information we can, taking the blood pressure two or three days before the operation, and then two or three hours before. If we have a blood pressure of 160 or 180 we should make some preparation beforehand. A drop or two of veratrum every hour or two, or a drop every three hours hypodermatically.

A few years ago a man came from a distant city who had had trouble with his eyes. He had been to an oculist, but when he was brought to me I looked him over and decided at once that he had a high blood pressure instead of something wrong with his eyes. He had one large pupil and one small. I checked up his blood pressure and found it to be 198. He was a banker and had one or two side issues; he worked after hours; then he had a little dairy farm and worked hard looking after that. He took no rest whatever. I asked him if he rested after dinner—no; drink a large quantity of water—no; eat regularly—yes, and also irregularly. There was no period of rest. I pronounced him an unfavorable case.

Only by working with the blood pressure instrument will you appreciate its value.

Dr. Barwick: The danger of the blood pressure instrument is that if you have a systolic of 180 and a diastolic of 95, the indications are all right; but if they come close together, there is the danger.

Dr. Mundy: That is the point I spoke about. It is the ratio that remains between the systolic and the diastolic that gives your prognosis. For instance, if the systolic is 220 and the diastolic 110, the pulse pressure is 110 and the ratio is one.

The trouble is the blood pressure instrument is worked too hard, and may have a psychological effect on the patient. But you have not made your diagnosis when you say you have high blood pressure. The insurance companies demand two readings, and some demand three. We are just beginning to realize that the thing has been over-worked. I look upon blood pres-

sure as corroborative evidence in diagnosis which is of value in your prognosis. We do not treat blood pressure, we treat the patient. I use the auscultation method entirely and always take two reading and sometimes three. In a normal man if the systolic is 120 the diastolic ought to be about 80. The rule is to take 100 and add one for each year of the man's age. That is not a hard and fast rule, but it is a working rule.

THE SPINE.

Wm. P. Best, M.D., Indianapolis, Ind.

In 1900 it was my privilege to report before this association the result of a study of more than fifty cases of irritable spinal segments and their association with or dependency upon chronic visceral disease. Having since then continued my observations, I am impressed with the importance of this study and feel justified in again speaking on this subject. I shall not deal with details but briefly mention some conditions, their bearing on or association with visceral diseases, and the importance of relief of irritable spinal segments in order to permanently relieve this type of patients.

To my knowledge Abrams is the only one who has devoted to this condition much time and research and worked out specifically the relation the one bears to the other. To quote: "Irritable foci in the cord may survive the apparent cure of a visceral disease. This is shown by the persistent areas of vertebral tenderness, the accentuation of physiological reflexes, persistent dermatomes, reflex muscular contractions corresponding to the irritable spinal segment, and subjective sensations corresponding to the hypersensitive spinal segments. It is not unusual for patients to complain of pains or sensations in definite regions of the body (previously implicated in visceral disease) under emotional influences."

This, in a brief statement, covers about all that was said by writers concerning this subject twenty years ago, and its similarity to statements then made shows but little advance beyond what we then knew. But in specific diagnosis of these conditions Abrams has gone much further and has added much of importance to the study and knowledge of this interesting subject.

The chief object of this paper will have been accomplished if we can stimulate clinicians to direct more attention to this very common expression of a vicious circle which will prevent full recovery or become the cause of never-ending complaint. Patients who have suffered from pelvic disease, whether relieved by therapeutic or surgical means, will continue to suffer from pains, not traceable to the pelvic organs always, but many times to tender segments in the lumbar and lower dorsal spine.

How many of us find the peculiar depression, anxiety, fear of impending danger, forgetfulness and undue irritability which make up the specific indications for pulsatilla in our lady patients who have suffered from pelvic disease, which seems to be improved by treatment, medical or surgical, or by judicious combination of such measures, yet the nervous symptoms and mus

cular hyperalgesia continue, some of them suffering very much the same as from acute neuritis. These conditions are but a part of the circle of influence for harm. The irritation can not long continue without modifying the nutrition of viscera supplied from these tender segments, and reparative processes which we hope to have continue and complete the work of restoration fail to do so because of the trophic disturbance.

This subject, then, becomes one of great importance in the treatment of patients whose visceral ailments are chronic, because to be of great benefit to them and to give them permanent relief we must carefully study the reflex disturbances, spinal segmental irritation, which is easily discovered and its relief attended by much benefit.

This is a great subject and we here present but one view of it for thoughtful consideration. Its careful study will well repay. The benefit you can render by proper means is due your patient.

Chronic diseases of the intestines, stomach and other viscera produce conditions just as marked and specific in their relation to ultimate results as do those of the pelvis. No clinician can afford to neglect this subject if he is at all interested in the treatment of chronic diseases.

DISCUSSION.

Dr. Wm. P. Best: I am sorry to present something you will not discuss. I presented this subject in 1900 and it had the same reception. I wish to add one thing. If you will take the pains in the examination of your chronic patients you will be surprised to find how many of these patients have sore spots on their spine and how quickly they are relieved of this vicious circle of nervous disturbance and visceral complaints when you relieve that spinal trouble, and they will not get relief until this is done. I hope our men will take the pains to investigate this carefully, because it will not only repay you in the establishing of your reputation for relief of chronic diseases, but it will benefit your patients.

I did not take up the treatment of these cases in detail for the chief reason that as Eclectics I did not need to. If you will study the segmental irritation you will find where the difficulty is and the specific indication for treatment. I use electricity—the sinusoidal current. Some are relieved by a very light application of galvanic current, some by a fine faradic current, but do not use it unless you have a long coil and a fine current.

These patients are very much benefited by some form of treatment in which you make applications of heat or cold. The best form I have found is the application of moist heat. I use a lamp and I get better results from heat—hot towels, hotter than you can handle them. If you take a bath towel, large size, and fold it four thicknesses and then fold it lengthwise, dip both ends into hot water and throw the loop around the faucet and squeeze the water out you can apply that towel very hot—it is surprising the heat some of these patients can stand. That can be continued for ten or twelve minutes with great relief to the patient.

These things start you on the road to success; they make your patient have confidence in you and your specific medication, in the meantime they are doing their work. Stand your patient before you, or have her lie on her face, and go down her back with your fingers, and she will shrink when you come to the tender spot. Then find out what organ is supplied by that tender portion of the spine and get busy and relieve it.

REPORT OF A STILLBORN CHILD, BREECH EXTRACTION, WITH TRUE KNOT IN UMBILICAL CORD.

Frank A. Mack, M.D., E. Braintree, Mass.

Past History.—As a child enjoyed good health. Nothing of unusual interest marked her early adult life. Started to menstruate at thirteen years of age. Periods occur every twenty-six days. Before marriage were attended with pain and profuse hemorrhage. Usual duration of period three days, during which time she soiled eight or ten napkins a day. Has been married four and a half years. In latter part of July, 1918, fell down stairs and result was a miscarriage at three months' pregnancy. One week later was operated upon, a dilatation and curettage being performed. History of uneventful recovery follows. In August, 1918, had influenza; sick for three weeks. Made a good recovery. Patient first came to office on July 10, 1919.

Date of her last period April 1, 1919. Since then symptoms of morning sickness. No monthly periods. Changes in the breasts and slight increase in size of abdomen.

Examination.—Breasts: Montgomery's tubercles and nipple areola significant of pregnancy. Very slight enlargement of abdomen. Bi-manual examination with extreme caution elicited "Hegar's sign" and engorgement of vaginal mucous membrane present.

Diagnosis.—Pregnancy.

Treatment.—Symptomatic, expectant. Date of confinement estimated January 9, 1920.

August 14, 1919. Pelvimetry reveals no measurements pathological or contra-indicatory to other than normal ante-partum state.

September 15. Patient in good condition. Urine: Sp. gravity 1.023; negative for albumin and sugar. Fetal heart sounds auscultated, left upper quadrant two inches to left of umbilicus and one and one-half inches above median transverse line. Pulse rate 156 per minute; strong and full. History of plenty of intra-uterine life.

November 15. Patient in good condition. Urine: Sp. gravity 1.020; negative for sugar; albumin, slight possible trace. History of plenty of activity.

December 15. Patient in good condition. Urine: Sp. gravity 1.020; negative for sugar; albumin, slight possible trace. Fundus settling considerably. Fetal head to the left and below umbilicus. Rate 138 per minute.

January 8, 1920. Visited patient at home. Nothing of importance. Urine: Sp. gravity 1.021; negative for albumin and sugar. Fundus well down. Fetal heart relative position as December 15.

Called on patient three times between January 9th and 21st. In good condition. Urine negative. Plenty of fetal activity and heart sounds strong. Now, according to estimate, twelve days over term.

At 5 p. m. January 22, 1920, nurse called office on telephone and reported patient complained from noon of that day of severe pains in back; had also

a very poor night's rest due to extreme fetal activity. Notified nurse to keep me posted as to condition.

At 11:45 p. m., January 22, nurse informed me that membrane had ruptured and large amount of water passed. Pains, however, were at least one-half hour apart and very weak. Left at 12 midnight for case. Arrived 12:30 p. m. Examination digital. Very little dilatation of cervix. Pains every twenty minutes but mostly in back, radiating to groins. Fetal heart high, left of umbilicus. Rate 140. Instructed patient to save her strength for pains and bear down, also to move around.

At 1:30 a. m. examined again. Very little relative change in progress of labor. Instructed nurse to call me when needed. Lay down for three and a half hours.

At 5 a. m. pains every fifteen minutes but weak. Patient's condition good. Fetal heart unchanged. Rate 142.

At 7 a. m. pains every twelve minutes. Patient in good condition. However, fetal heart sounds now in right quadrant six inches below umbilicus and rate 146. Patient complained of extreme activity and terrific pains from small of back to groin. Digital examination revealed soft parts, probably breech.

At 8 a. m. breech presentation confirmed by presence of meconium on gloved finger and in vagina.

At 9 a. m. telephoned for consultant J. H. Cook, M.D., of Quincy, ex-lieutenant M. R. C., U. S. A. during world war. He arrived at 9:30 a. m. After examination he confirmed the breech presentation and auscultated the fetal heart in the right quadrant. Rate 146. Decided to try pituitrin, 1 mil. subcutaneously. In about fifteen minutes pains were occurring every four minutes; strong, and uterine contractions good.

At 10:45 a. m., although the pains were more frequent, the patient bearing down well and in good condition, little or no progress in descent followed. We decided to perform manual extraction. Under ether anesthesia, the patient in exaggerated dorsal position, we delivered the breech at 11:30 a. m.; the after coming head was delivered forty-five seconds later. The cord was black, swollen, and congested to at least three times normal circumference. It measured 45 c. m. About one-third of the distance from umbilicus of child (a female), well formed but now pallid, was a true knot in the cord. It was firm and unyielding and with difficulty untied later. All methods of resuscitation failed on the child. Death was classified as asphyxia neonatorum, contributory asphyxia pallida.

Placenta delivered at 12:05 p. m.; very black and rather small; membranes present. One dram of ergot administered by order one hour after recovery from anesthesia. Comparatively slight hemorrhage. A second degree perineal tear, not involving deeper structures nor sphincter ani muscle repaired.

Three visits post-partum were made. No record of other than normal temperature or ten degree increase in pulse beat noted. Discharged on January 28, 1920.

Resume: Edgar states that rarely in his practice has he encountered a true knot in the cord. On page 222 of his practice anomalies of formation are dwelt on and he states that rarely does a true knot form.

Shears states that true knots in the cord are the result of child passing through loop in cord and frequently is the causative factor in the death of child.

CHOREA.

W. N. Mundy, M.D., Forest, O.

Early in the history of serum therapy the *Eclectic Medical Review,* commenting on the subject, said "there is nothing new under the sun," so in studying this subject I find in Watson's Practice of Physic, published in 1845, this statement: "Chorea is a disease of a spasmodic kind, and essentially belonging to the nervous system. Its prominent symptom is an irregular and involuntary chronic contraction of some of the voluntary muscles, which, however, are not wholly or constantly withdrawn from the government of the will."

In the March, 1919, issue of the *Hahnemanian Monthly,* I find this definition: "It is an acute disease of the nervous system, evidenced by the progressive development of all varieties of irregular, involuntary and inco-ordinate movements of the muscular apparatus, manifested even while the person is intentionally at rest."

Osler describes it as an acute disease of childhood, rarely of adults and of the aged. Characterized by irregular, involuntary movements, a variable amount of physical disturbances, and associated very often with arthritis and endocarditis. The disease is usually considered as a neurosis, but the clinical characters of the severe cases and the frequent heart and joint complications have suggested to many recent writers that it may be due to a specific germ.

We are now speaking of Sydenham's or minor chorea. Judging from the definition given, there is not much evidence of an advance in our knowledge of this disease since its classical description by Sydenham.

Whilst it is claimed to be an acute infectious disease of self-limited duration, there is not an unanimity of opinion as to the infectious agent. We are all familiar with the theory of the relationship between rheumatism and cardiac diseases, and have heard it discussed pro and con. I have thought in several instances I could detect a direct connection. For instance, a young woman had a severe attack of follicular tonsillitis, soon developed arthritic symptoms and eventually chorea. Several such cases have come under my personal observation, and yet in not sufficient numbers to warrant a positive statement as to the relationship between them. This question was a debated one in 1845 and is still a mooted one. Girls are affected more often than boys—in fact, more than twice as often. The majority of cases occur before the sixteenth year and rarely before the fourth. There is some

seasonal incidence, the disease reaches its acme in March, rising rapidly in December, stationary in January and February and falls in April. This seasonal incidence corresponds with that of rheumatism and the usual season of sickness. A neurotic predisposition may be a predisposing cause.

Fright, worry, mental shock and strain, especially overstudy, have ever been considered as exciting causes. Reflex irritations have been mentioned, yet their role are uncertain. We have seen it associated with pregnancy.

The theories regarding its pathology need only be mentioned. Those advocated now are the neurotic, infectious and rheumatic.

The symptom-complex and the absence of mental symptoms as well as sensory disturbances and its unilateral distribution, point to the cerebral cortex as the location of the disease. As the disease is seldom fatal, the post-mortem findings present no uniform or characteristic changes. Osler claims to have found cardiac lesions in over 90 per cent. of the cases collected by him.

Whilst its onset may be slow or insidious, the motor symptoms may appear abruptly, within a few hours or days after a fright or mental disturbance. Peevishness, apprehensiveness and obstinacy, restlessness and difficulty in getting to sleep are frequently noted as prodromal symptoms, as well as is inattention, forgetfulness and difficulty with studies. It is in those children whose mental capacity has been over-crowded and stimulated by reason of their precociousness that chorea is apt to develop, and not in the plodder.

After a variable period the motor symptoms appear. They appear ordinarily first in the face or muscles of the hand and arm. They may be confined to a single extremity, one side of the body or the entire body. The movements consist of disordered, irregular, arrhythmic action or spasm of the muscles. They can be slightly controlled by the exercise of the will or execution of a voluntary movement, and usually cease during sleep, but embarrassment or emotional excitement causes an exaggeration of the movements. Even the knowledge of being watched or examined will cause an increase of the spasms.

Several types of the disease have been described, the types being distinguished by the severity of the attack. It is not necessary to enumerate them; neither is it necessary to describe in detail the movements of the limbs or gait in walking occasioned by these involuntary muscular movements. The sphincters are not involved save in fatal cases, and aside from the temperamental and moral changes previously mentioned, mental disturbances rarely occur.

Cardiac lesions, often of a functional character, are quite common. In those of a rheumatic origin, organic murmurs are often present, which persist even after the chorea has disappeared. The course of the disease is usually marked by exacerbations or remissions of the peculiar movements. In the majority of cases, the chorea gradually declines. Yet when the movements no longer occur involuntarily they may still be provoked in the face and tongue by directing the patient to protrude the tongue. The average

duration of the disease is six weeks, but cases lasting much longer are not very rare. The common termination is a complete recovery.

Chorea is considered a self-limited disease of a favorable prognosis. Complete recovery is the rule, especially so in children. As the adult age is attained the prognosis becomes more guarded; occurring in pregnancy, it produces a high mortality, yet the only such case occurring in my individual practice resulted favorably. As in all self-limited diseases, the specific remedies are numerous. We feel that it would be much better to adopt a rational plan of treatment, by removing any reflex irritation, obtaining a normal performance of the various functions of the body, rather than to rely upon any of the so-called specifics. We have said that during rest the spasms usually cease or are at least ameliorated. That being true, rest in bed, so far as is consistent with the patient's general health, appears to me to be indicated. In fact, we feel that rest is essential to an intelligent and successful treatment.

In addition, a good, wholesome, nourishing diet is necessary. Often these children are anemic, poorly nourished and have a capricious appetite. Their needs are studied and a dietary prescribed which will in our estimation fulfill the demands of the child. Rest, diet, baths and massage will fulfill many demands in these cases. When we come to the consideration of remedies we note the fact that arsenic in some form has been considered essential to the successful treatment of chorea for ages. You are all familiar with its advocated method of administration. Personally, I do not like it, as I find it frequently interferes with the appetite, produces intestinal disturbances, and if pushed too far may produce a peripheral neuritis. It is indicated at times by pallor, emaciation, and flabby muscles. Yet when anemia is present I much prefer some form of iron.

Macrotys has long been a favorite remedy with Eclectics. It is especially valuable when we have a rheumatic history or rheumatic symptoms. This is especially true when the patient complains of muscular soreness and pains.

The salicylates are also used in rheumatic cases and are useful in rheumatic cardiac lesions, coupled with rest in bed.

If there is insomnia hyoscyamus is used. The older men present, especially those who listened to the lectures of Prof. Locke, will no doubt remember his prescription of macrotys and scutellaria for this disease.

You can learn from these few items I have no specific treatment for chorea, but each case is a study of itself and managed in accordance with the condition of the patient. In fact, we believe there are but few diseases for which we possess a true specific treatment or remedy.

DISCUSSION.

Dr. R. E. Holmes (Harrisburg, Pa.): It has always been stated that chorea is a sister disease to rheumatism. I have come to a pretty firm conclusion that rheumatism is produced by a toxemia, and having this verified in two or three instances of late I wonder if this toxemia does not affect

the nerves which brings on this chorea. I wonder if sometimes chorea does not come from something like bad tonsils or some such infection.

Dr. J. Earle Holman (Indianapolis): I had a case with aortic and mitral lesion, that gave a history of rheumatism; the condition was very bad indeed. I removed the tonsils, did a circumcision, directed them to keep the child away from picture shows, have him take an afternoon nap, gave him salicylate of soda by rectum every night, and in the course of six weeks the knees, which were very large, were smaller, the chorea symptoms were gone, and in two months there was no leak in the heart.

Dr. H. M. Powers (Ohio): I have a case where I want to remove the tonsils but the parents will not consent, and I have been able to control the chorea with Fowler's solution of arsenic and elixir of iron with salicylate of soda.

Dr. W. N. Mundy: Speaking of the toxic condition in association with rheumatism, I think we should make a distinction between rheumatic pains and rheumatism as a disease. There is a difference. All of you who read the journals are familiar with Lane's theory of intestinal stasis. Lane, of England, a few years ago was going to cure all forms of rheumatism, chorea and heart affections by relieving Lanes's kink and removing intestinal stasis. There is no doubt but what a bad infectious condition will produce these rheumatic pains. We see that in badly nourished children when we come to examine their tonsils. The diseased tonsil should be removed, but I am not an advocate of the wholesale removal of tonsils. Again, I think we should make a distinction between the local spasm due to bad teeth or polyps in the nose and chorea. The rheumatic theory of chorea I have been familiar with ever since I was a medical student, and it has been well discussed, pro and con. That there is sometimes an infection there is no doubt, but whether it holds as a rule I am doubtful.

A TALK ON INTRAUTERINE MEDICATION

Chas. Woodward, M.D., Chicago, Ill.

Intrauterine medication, originated by the author in 1885, is a method for treating uterine diseases, and for controlling inflammation, infection and reflex irritation by repeatedly washing out the uterus without the use of anesthetics. For ages physicians made a serious mistake, when washing out the uterus, by trying to pass several gallons of irritant, medicated solutions into its cavity, whose capacity is only a half-ounce. These solutions, flowing continuously into the uterine cavity from an elevated reservoir, produced irritation and spasm (uterine colic).

The author's method is to pass three ounces of one-third to one-half strength solution of peroxide of hydrogen, alternated with five ounces of mild alkaline antiseptic, into the uterine cavity, through a recurrent douche, with a *half-ounce* long-pipe hard rubber or silver–plated *syringe,* which does not produce irritation or uterine colic.

The uterus is subject to many diseased conditions that do not require an operation, but which respond satisfactorily to this simple and efficacious method of removing from its cavity organic poisons. Inflammation and benign and malignant growths are more readily absorbed from the pelvic tissues than those on the surface of the body.

Women are subject to two epochal periods, the commencement and the cessation of menstruation. The beginning of menstruation is often obstructed by anemia and lack of development, the ending or menopause is marked by pathological conditions.

Medical writers say that the menopause is a physiologic function, which is true only when the uterus is in a normal condition—that is, when a woman approaches the change of life with her uterus free from injury, inflammation, discharge and edema. A physiologic menopause, then, is one free from pain, hemorrhage, infection and all symptoms that may be attributed to this period.

A pathological menopause will occur when a woman approaches the climateric period with either injury, inflammation, displacement, discharge, edema or organic disease of the uterus.

Edema of the uterus inhibits perfect expulsion of blood following menstruation, which decomposes and causes uterine infection, producing all symptoms that appear during the menopause. A pathological menopause, then, is characterized by *uterine infection,* and the intrauterine medication method becomes a specific treatment by removing the organic poison from the uterus. At this time of life women are apt to regard operations with timidity. For such reason should women be denied this specific, humane and painless treatment by physicians who have neglected to inform themselves of its efficacy and resources?

The following cases show the resources of intrauterine medication in uterine growths and in emergency cases:

A family consisting of parents and their son and daughter had typhoid fever; the son's wife, who was expecting daily to be confined, on account of circumstances was compelled to nurse the others. She threw the waste products from the typhoid patients into the lavatory which she herself used. Within twelve hours after her delivery she had a severe chill, followed by a temperature of 107° F., abdomen bloated to the limit. A nurse was secured, with whose assistance I placed the woman crosswise on the bed and removed the suppressed lochia and organic poison from the uterus with the alkaline and peroxide solutions. This treatment was repeated every twenty-four hours for three days, then every forty-eight hours. A mild physic of magnesia sulphate was given and the body sponged off with specific med. veratrum ℥ ij; aqua fervens, oz. viii, which produced diaphoresis; the temperature fell to 100° F., when four grains of quinine restored the lochia and she made a good recovery in ten days.

A young married woman was told by a neighbor how to produce an abortion harmlessly. About the fifth day after her attempt she began to have an offensive discharge, with pain, chill, headache and rise of temperature. On the eighth day I was called and told that she refused to submit to an examination. When I started to leave the house she began to cry and asked if medicines would not control her sufferings. I replied that only the removal of the poison from the uterus could relieve her. I then learned that another physician had treated her three days by internal medication without relief.

The treatment which obtained immediate relief consisted of washing out the uterus, a mild physic, and the producing of diaphoresis by sponging off her body with specific med. veratrum ℥ii, aqua fervens oz. viii. The cleansing of the uterus was repeated every twenty-four hours for three days, then every forty-eight hours for four additional treatments, when she fully recovered from the abortion and resulting infection.

Mrs. B., age forty, of Indiana, enceinte two months, visited Chicago and had the ovum contents removed from the uterus and returned home on the same day without further treatment. Two years later she called for relief from pelvic pains, backache and a sanguineous discharge. A microscopic examination of a specimen of the cervix determined it to be a degenerative substance from a malignant growth. The neck of the uterus was hard, nodular, partly broken down and the uterus fixed. Urinalysis reaction exhibited extreme alkalinity, or broken ratio of the secretions, sallow complexion, perversion of the circulation and metabolic processes.

Treatment—A diet was suggested to restore the normal proportions to the acid and alkali secretions. Her skin was anointed twice a week with olive oil and dry towels ordered every morning. Abdominal stupe of carbolated sulphate of magnesia was applied every night. Her uterus was washed out every forty-eight hours with the alkaline and peroxide of hydrogen solutions, followed by a solution of sulphate of iron from five to ten grains to the ounce. In the absorbent solution magnesia sulphate oz. ss., specific med. phytolacca oz. ss., aqua q. s. oz. iv. A pack of cotton with string attached was saturated and inserted against the cervix, to remain forty-eight hours, when the treatment was repeated. Two months of this treatment absorbed the cervical growth, healed the broken down parts, and restored the uterus to three inches of movement. To absorb a uterine cancer one must restore the ratio to the acid and alkali secretions, improve metabolism, and correct the circulation.

Intrauterine medication furnishes a most reliable treatment for the great variety of conditions occurring in gynecologic practice.

LOBAR PNEUMONIA.

M. S. Canfield, M.D., Frankfort, Ind.

We have always thought of pneumonia as an inflammation of the parenchyma of the lungs. More recently, however, it has been designated as an acute infectious disease, in which there is a congestion, or exudation, and sometimes resolution or suppuration.

In many cases of lobar pneumonia the diplococcus pneumoniæ is present, and in some cases other organisms, such as the streptococcus, are found.

Often we are called to see a patient suffering from a chill, very prolonged, and followed by severe headache and an increase of temperature, likely 103 or 104. This may be followed by a dry cough and a severe pain near the nipple of the affected side. The respiration is about 60 or more,

often as high as 80, the alæ of the nose dilate with every inspiration, the face becomes flushed and frequently a circumscribed spot appears upon the cheek of the affected side. The expectoration becomes bloody and very tenacious, with pulse full and bounding. The tongue is dry and furred, heavily coated, brown or dark; urine is scanty and possibly has a trace of albumen.

Within the first twenty-four hours the fever has risen to its maximum, and continues with remissions until about the tenth day, when, if patient has received a treatment adapted to this very serious condition, the temperature will drop, the body becomes moist and normal respiration is again established.

I know quite well these statements are not favorably received by physicians who claim there is no treatment which will relieve this trouble, which has proven fatal in such a great number of cases. But I can only state that after being actively in a practice in which many cases of lobar pneumonia have been treated, for more than forty years, it is astounding to me to read and hear physicians claim that "nothing can be done for the condition itself."

Briefly, I will name the means by which I have seen many serious cases recover with a very low mortality.

Place your patient in a room well ventilated with a temeprature of 68 or 70. Rather prefer a temperature of 68 in a quiet room.

Cover the affected lung with libradol and good covering of oiled paper and gauze or cotton. This should be changed every day, morning and evening.

With a temperature of above 100° and full pulse, veratrum will give almost certain relief, if continued a reasonable time.

℞ Sp. Tr. Veratrum ..... gtts.x
Aqua ..... ℥lv
S. Take one teaspoonful every hour, alternated with—

℞ Sp. Tr. Echafolta ..... ʒl
Elixir lactated pepsin ..... ℥ii
Aqua ..... ℥ii
S. Take one teaspoonful every hour alternately with above.

Thus your patient will receive a dose of medicine every half-hour when awake.

When the respiration is rapid and the cough is paroxysmal, with a viscid expectoration great relief will be found in giving stillingia liniment in two or three drop doses. The following will be found very satisfactory to use to satisfy the great anxiety about the cough:

℞ Glycerine ..... ℥i
Stillingia liniment ..... ʒi
Aqua ..... ℥i
S. Give one-half teaspoonful at times of extreme coughing.

This need not in any way conflict with the above treatment and will often quiet the patient and be followed by rest.

I wish to speak in strong terms against the use of any opiate in this condition. While morphine may apparently give some relief, it will only be followed by an unpleasant reaction.

When the pain is severe in the region of the affected lung much relief will follow—

℞ Sp. tr. bryonia .....gtt. x
Sp. tr. veratrum .....gtt. x
Sp. tr. jaborandi .....ʒi
S. Take one teaspoonful ever one-half hour.

Acute edema becomes very serious when complicated with heart disease and must be met promptly by the proper indicated remedy, which in some cases is either apocynum or elaterium.

℞ Tr. apocynum can. .....ʒi
Simple elixir .....ʒiv
S. Take one teaspoonful every three hours.

We have to treat no trouble which demands more care and close attention than pneumonia. Especially in the early stage much of our success relies upon thorough diagnosis and giving the remedy indicated by our specific diagnosis.

I am very favorably impressed with pneumonia bacterin as a prophylactic against pneumonia, but my experience in this at this time is not such as would warrant me in stating more at this time. If this proves as good in the future as it has in the few cases I have known, it will be a most valuable prophylactic.

RELIEVING RECTAL IRRITATION AND NERVE TREATMENT

Geo. C. Porter, M.D., Linton, Ind.

The most neglected portion of the human body, perhaps, is the anal outlet of the body. Doubtless because it occupies a hidden portion and deals with the nauseating excreta of the alimentary tract, is this true.

Every school teacher is laying stress upon the necessity of keeping the mouth and teeth clean and sanitary, for the sake of preventing disease as well as overcoming disease already present, and maintaining a respectable appearance. Every dentist—that are so plentifully supplied—are telling us of the great importance of this sanitary measure, as well as calling attention to the many sources of bodily infection from necrotic teeth, pyorrhea, etc. Well and good is all this, and no one knows better than the physicians of the country how all-important this is; however, of equal importance as to the welfare of the being is the proper care of this neglected spot, "the rectum." And, if possible, of greater importance when it comes to the treatment of chronic conditions, because it is not only a field for the absorb-

ing of waste and infected excreta, causing many a furuncula, lazy, tired and worn-out conditions, sallow complexion and general broken health, but from the importance it bears to all the other parts of the human body through the sympathetic nervous system. The essential terminals of the sympathetic ganglia are found in the upper sphincter and lower inch of the bowel.

A necessary product of time and usage must prolapse, make redundant tissue, chafing, fissures, dilated hemorrhoidal vessels, open ulcerative pockets, elongated papilla, highly sensitive in nature, any one of which or maybe all to be found in a given case of this neglected spot.

As before stated, most people so involved are, up to the age where all these burdens are plainly realized in chronic conditions and ill health, and are chasing from one physician to another looking for the proper applied remedy to bring relief. This being essentially impossible of attainment, they run the rounds of physicians in search for the balm of Gilead to relieve them, in many instances not conscious that the trouble lurks in this neglected spot, and unless the physician is really an orificialist, this spot remains unthought of and untouched. But I say to you, that no physician can possibly succeed with such cases until he goes after these troubles of the lower inch of the bowel, as a foundation for his subsequent treatment.

Many times no other treatment is required, especially in the younger classes. I shall not here take up the time to give the idea of why such conditions produce such results in disorganized functionating of the internal organs, as everybody is more or less familiar with the philosophy underlying and governing orificial thought. Only just a little about how these conditions of pathology are to be met.

Examination—The patient is usually caused to lie down upon table or operating chair in the recumbent position, with limbs flexed up into abdomen, feet resting in fixation points of the table or chair. Parts are now easily exposed to view, where usually the first to greet your view is a roll of redundant tissue varying in size. Upon folding these flaps back there will usually be seen the swelled, bluish appearance of hemorrhoidal vessels, usually just outside of the lower sphincter. After anointing a bi-valve rectal speculum, gently pass into the anal opening, dilating. Many times fissures (deep raw crevises) will be seen at the bottom of the folds caused by the constriction of the sphincter muscle. These are very sensitive and should be cauterized with pure carbolic acid, but the redundant tissue must be taken away to prevent deep folds and a consequent return of fissure. This dilating may disclose bad conditions of hemorrhoids, which should be removed by complete excision. If ulcerative pockets or sensitive papilla are found, they likewise should be removed by excision. If there is bad hemorhoidal conditions and prolapse of the bowel, usually the excision of the lower inch of the bowel should be advised as done in the American operation.

It seems to me unnecessary to go into details of the technique of these various operations for nerve impingement. The slit operation for piles is doubtless the best procedure for radical cure of them; however, there is the occasional case relieved by the injection method. In most all cases calling

for pile care there is tight sphincter, pockets and papilla, all of which need definite care to stop waste of nerve energy, which the operation of injection overlooks, and therefore the finer products of rectal work are lost thereby. The removal of ulcerative pockets and papilla are by simple excision, which carry a wonderful benefit to any patient possessing them.

Of all rectal care, perhaps none has a more pronounced effect than dilating the usually too tight sphincter. This is best done with the tri-valve speculum, which is inserted full length into the rectum, then by dilating, the blades spread in such a way as to make dilatation from above downward. Gentle traction should be made on the speculum, and the patient instructed to assist its downward passage by expulsive effort, as if at stool.

The influence of this process is wonderfully good over all chronic ailments. For it causes deep inhalation, bringing oxygen into lung spaces where it had not been by inhalation for many long days. It flushes the capillaries of the entire body; brings tonic and tone especially to an enfeebled alimentary tract, and very materially assists in overcoming constipation. This dilating should be a usual follow-up treatment after the rectal irritation has been removed, and persisted in two or three times a week until the best possible resolution from the chronic conditions seeking relief have been attained.

TREATMENT OF TUBERCULOSIS.

N. G. Wilson, M.D., Greenville, Mo.

The medical profession is searching for a remedy or a combination of remedies that will cure tuberculosis, and for the last quarter of a century and more much time and labor have been spent and thousands of dollars have been expended in research work to discover a satisfactory remedy. And notwithstanding many methods of treatment have been recommended and thoroughly tested, only to be relegated among the great list of remedies that failed to bring the result desired.

Not all of these remedies that have been tried and recommended are without merit. There are those who claim to be curing a large percent of cases, and no doubt their methods of cure have merits in them. Yet tuberculosis still remains to be a much-dreaded disease, not only by the unfortunate victims and their friends, but by the physicians called upon to treat them.

Here the responsibility falls upon our shoulders, and naturally leads us to ask the question, "where is that remedy to be had"? Who knows? Looking at the question from a personal viewpoint, I think we are yet in the dark; that we are yet in a field of experimentation. Looking over the remedies recommended today you find the old-timers at the top of the list. Creosote, guaicol, cod liver oil, etc. And yet after many years' use of these remedies as well as others, we still have an increasing percent. of mortality, with an increasing number of cases. There are a few who are experimenting with newer remedies and newer methods of administrations in an endeavor to find

a method of treatment, which will hold out some hope for these unfortunate victims. It is not my intention to write on tuberculosis, only so far as inula-echinacea is concerned in its treatment.

Inula-echinacea subculoyd is the remedy that Dr. V. Von Unruh of New York has been using for something like eight years. He tells us in the little pamphlet which he sends out or rather Lloyd Bro. sends out with each bottle of the remedy, written by the doctor that he is curing about 100 per-cent. of the incipient cases and 77 per cent. of the more advanced cases. This is very encouraging indeed, so much so that I believe it worthy of a trial by all. My use of the remedy is limited but not without interest.

Dr. Von Unruh recommends its use by the deep muscular injections or still better intravenously. He says that inula therapeutically controls the excessive sweating, decreases the expectoration, stimulates and promotes secretions, and exerts a direct toxic effect on the tubercular bacilli and echincea will stimulate the catabolic processes, greatly increase the glandular activity; antagonizes all septic processes, greatly increases the elimination of the toxin from the organism, and has a destructive effect on the streptococci and staphylococci and other pyogenic organisms. If any of you have never given this treatment intravenously, perhaps my experience will be of some interest. In one case in which I administered it intravenously was on a lady of about fifty years of age. She had been losing flesh, and in general decline of health for ten months. At the time I was consulted, she was having hemorrhages from the lungs, an evening rise of temperature to about 102-3 degrees. I sent the sputum to the State Bacteriologist for examination; he reported "positive." I gave her intravenously only three minims; inside of thirty minutes she was seized with a severe chill which lasted two or more hours. When the fever began climbing and registered 105, she was somewhat cyanotic, suffering with headache and backache and vomiting; this lasted about six hours.

Two days later gave her one-and-one-half minims, same results as before. Three days later I gave one-fourth mill, and to my astonishment she shook as before. I decided to discontinue the treatment; she, however, wished me to give her more, saying that she was sure it was doing her good, that she felt much better during the interval of the treatment. I said, "All right, if you procure a trained nurse," this she did not do. Hence I did not resume the treatment. I believe I lost an opportunity to give the treatment a fair trial.

The most interesting experience that I have had with the intravenous injection of the inula-echinacea subculoyd, was that of a soldier boy. While stationed at Camp Pike, Ark., he contracted pneumonia, in November, 1917, from which he has never recovered. The acute stage passing into a chronic condition. The lung having failed to clear up retarded resolution. The inflammatory exudates retained, and at the time I saw him, March 9, 1918, these exudates were rapidly breaking down into pus. In the absence of a microscopical examination, it was a question in my mind whether or not it was a case of tuberculosis, or a condition the result of the pneumonia, with

other micro-organisms complicating. To the latter view I was very much inclined and so stated. However, a self-styled expert diagnostician, who treated him two weeks before I was called, said any one could run by him and tell that he had tuberculosis. When I first saw this case he was so weak that he could not turn himself in bed, greatly emaciated, no appetite, temperature 103, pulse 180, respiration 50, coughing incessantly, pain in his lungs, and across his kidneys. Urine scanty and highly colored. Sweating profusely, and with an anxious expression. To clear the diagnosis I sent his sputum to the State Bacteriologist for examination, and his report was negative. I repeated this several times at intervals of six or seven days, and every time it was a negative report. Then I sent a sample to Dr. J. L. Ingrim; he reported T. B., and much pus. I again sent sputum to the State Bacteriologist, and requested him to make a full and complete examination as it was important to know the kind of infection I had to deal with, his report was abundance of pneumococci, and much pus, but no T. B. This confirmed me in my opinion that this was not tuberculosis.

Of this case I will speak only of the inula-echinacea treatment. The first dose I gave was five mils; second dose seven mils, no reaction from either of them. The third dose was nine mils; four hours later the nurse informed me that his temperature was 104, but subsided shortly with free sweating. The fourth dose I decided to drop back to five mils, as the other dose produced considerable reaction. These injections were two, three and four days apart. I administered this fourth dose about one p. m. There were three very busy people that afternoon, the patient, the nurse and myself. The symptoms following this injection were alarming. In twenty minutes after the administration he began shaking. I never saw as hard a chill in my life. It lasted three hours, the fever following went to 106½, pulse as fast as I could count, breathing rapidly and hard, suffering indescribably in his back and head. He was very restless, vomiting and bowels moving frequently. He was cyanotic all over his body, nails blue to the tips. He became delirious, but this finally passed off and he became comatose. His pulse finally ceased to be perceptible at the wrist, notwithstanding I was giving strong heart stimulants all the time. At this point I gave up and said to the nurse, he will be dead soon, and so informed the family. But he did not die. He began to improve and from that time on for two weeks he made rapid improvement. I promised myself that I would not give him another dose, but the family and patient seeing the wonderful effects for the betterment insisted on me giving it again. I was slow to do so, waited four weeks and then began by giving him smaller doses. First dose three mils, had as hard time as the previous time. Finally gave him two mils every other day, then every day, but it would always produce the chills and fever. At the time he discontinued the treatment he was so much improved that he could walk from the house to the front gate some twenty-five steps alone. Had a good appetite and could eat and digest most any line of diet. I wrote Dr. Von Unruh regarding these chills and fever following the intravenous injections; he being in the service of the Government, his

associate in the office answered, saying that Dr. Von Unruh had such reaction in some cases and that other doctors had reported like results, but knew of none dying from the effects. I desired to know of this society if they recommend the intravenous injection of inula-echinacea for tuberculosis or in those conditions of lung infection, like I have stated in the case of the soldier boy.

I cannot help but feel that this treatment promises to be a great boon to the treatment of tuberculosis, if taken in time. As to echinacea in snake bites I have tried it in two cases and with the best of results.

THE VAGINA, HYMEN AND PERINEUM.

T. H. Hauck, M.D., Terre Haute, Ind.

This subject is of considerable importance and we will try to treat it by briefly touching or leaving out the minor ailments, although they sometimes are of vital importance to the patient. We treat of the more important features of this paper in as rapid and brief a manner as is consistent with the subject.

When thinking of vaginal pathology we naturally consider troubles that may be caused by injuries, foreign bodies, coitus, child-birth and nerve irritation. Wounds not caused by child-birth should be cleaned with antiseptic solution, all bleeding stopped, and if of sufficient importance should be sutured with fine catgut or any other suturing material you may prefer.

Cystocele or anterior colpocele is a relaxation and bulging of the anterior vaginal wall and many times causes interference with the funtions of the vagina or bladder. The perineum may or may not be implicated in cystocele. Where these functions are interfered with, anterior colporrhaphy may be resorted to, which may consist of any one of several methods that will take up the slack in the tissues of the anterior vaginal wall. The incision must be made down through the vaginal wall, down to, but not through the bladder tissue. The excess bulging tissue is dissected free for some distance beyond the edges of the wound, so there will be no puckering of the tissues when the wound is closed. The diamond shaped and the oval shaped incisions are both used extensively. The wound should be closed by suture. I like to use two or three mattress sutures in this class of cases, as the tissues are sometimes somewhat pliable and the stitches do not hold well. If the vaginal wall has been torn away from its attachment to the pelvic fascia, it should be sutured back to it.

This fascia extends from the spine of the ischium to the pubic symphysis and is the upper point of insertion of the levator ani muscle. Make your incision as long as necessary, usually 1½ to 2 inches, through the vaginal wall from a point opposite the spine of the ischium toward the symphysis pubis, it will expose the fascia and then run your sutures behind this fascia when closing your wound, that pulls the tissue up to where it belongs and it will not give way again readily.

In regard to rectocele I believe this condition is largely the result of child-birth and as a rule is concomitant with perineal laceration and is remedied by the operation that takes care of the tear in the perineum.

Vaginismus is a symptomatic condition due either to a neurosis or some form of irritation. I have found a solution of menthol, 2 grs. to the ounce to be of much benefit as a local application in these cases. However, be sure to look for any irritation, and if you find any or have cause to believe any part has anything to do with the vaginismus look after it and remove it. And even then you will not always cure your case, for I have seen cases that resisted all kinds of treatment.

The hymen is ofttimes intact and again ofttimes irritated. It sometimes becomes serrated like a saw. There is occasionaly a constriction from a tense bandlike tissue which causes a pinching of the tissues. However, the hymen is many times intact and free from irritation and to your best belief causes no trouble or symptoms. If such be the case leave it alone, but if you even suspect trouble from that source, remove it by removing the hymen in its entirety, leaving no tabs and also at the same time remove any urethral caruncle that may be present. If there is any hemorrhage, control it and if necessary coaptate the edges of the wound. The vagina should be thoroughly dilated in this class of cases, as should also the urethra receive moderate dilatation.

Lacerated perineum is the result of child-birth and should be remedied immediately after the accouchement or as soon after as possible. The operator has the choice of several methods. Most any of the methods will be successful if care is used to bring the muscles together so that a good vaginal floor can be secured. One method is as follows: Secure with clamp or hemostat forceps in center on either side of the vulvar orifice, the tissue at the hymen line. This point represents the upper line at which point the two sides of the introitus are united when the operation is completed. All operative procedure should be done below these two points. Now take a sharp bistoury or scissors and make incision all the way around below and between the two clamps at the junction of the skin and vaginal mucous membrane; secure these edges so made with snap forceps; also place a snap forcep at the upper end of where you wish to operate in the posterior vaginal wall. You now have your field of operation marked out for you. Now insert closed blades of long sharp pointed scissors in the denuded place you previously made, exactly midway between the two clamps you put on first and with the aid of the forceps on either side to support the tissues and a rubber covered finger in the rectum you can gently push the closed scissors up into the tissues beneath the mucous membrane between the vagina and rectum, until you have reached the upper guide forceps placed there for that purpose; then open the blades *in situ* and pull them out, which opens up the space desired; you can complete the dissection on either side to the clamps you first placed on either side of the introitus; now dissect down on both sides and secure the levator ani muscles and suture them together firmly in the median line. It is important that you secure the muscles, for on it depends the suc-

cess or failure of the operation; so be sure you bring the muscles together and firmly secure them with suture. You can then close the wound in any way you like best. You can use the Pratt method or any method you prefer. You will need some deep buried sutures and be sure you do not puncture either into the rectum or vagina at any point in this operation.

In all this kind of work you must have everything clean, hands, instruments, tissues and site of operation and a clean operating room and table. Suitable post-operative dressings, care and treatment must be employed, and as a rule you will get good results from all the work recommended in this paper. In doing this work you relieve nerve pinching and nerve irritation and aid your patient in getting well of any trouble they might have.

VERATRUM VIRIDE.

CHAS. WOODWARD, M..D, CHICAGO, ILL.

Veratrum viride is sedative, diaphoretic, alterative, epispastic, stimulant, emetic and errhine. It is difficult to select another remedy in the materia medica that exerts so many definite and specific effects on the system as veratrum. These definite influences are best obtained when it is indicated and prescribed in minute, medium and maximum doses. In eclampsia it acts as an alterative in the blood and exerts an epispastic influence. It acts satisfactorily in acute arthritis caused by cold. There are few remedies equal of veratrum for controlling asthma that results from dry skin and intestinal infection.

Medical magazines contain articles by physicians who combine astringents and antiseptics with calendula and then extol the latter without an equal as an antiseptic and germicide. A long experience with veratrum and calendula as an application proves to me that the latter is not superior to the former.

We frequently meet cases of suppression of the secretions and determination of blood which develop an early crisis with absorption suspended when internal medication fails to exert any influence, as in dry skin, coup de soleil, erysipelas, confluent measles, malignant scarlatina.

I will demonstrate the local application of veratrum by reciting a few cases. A girl, age five, was overcome with the heat, temperature 103 Fah., dry skin, tongue and pulse indicated aconite and sulphite of sodium, which failed, and other internal remedies obtained no results. Osmotic pressure is often unable to restore secretion of the skin. After a sponge bath of veratrum ℥i, aqua ℥vi. temperature became normal within two hours.

A man with confluent measles had a high fever and intense burning, flushed face and headache; gelsemium failed for 24 hours. The irritation and inflammation of the skin were controlled with veratrum ℥ii, aqua ℥viii; immediately after sponging off his body.

A girl, age nine, with scarlatina, temperature 107, nasal passages filled with exudations, unconscious and absorption suspended. Two consulting

physicians thought her death inevitable. Her face, head and body were sponged off continuously for five hours with veratrum ℥iii, aqua Oii, at which time the fever fell and consciousness reappeared and she made a good recovery.

Another girl, age 10, with suppurative scarlatina, was under the treatment and advice of three physicians for three months; her temperature was 103 during which time her skin had been bacon rinded and desquamation still present and pus discharging from both ears and from twenty abcesses. In taking charge of this patient I freed her ears of pus three times daily and had her sponged off with veratrum ℥i, aqua ℥vi every twelve hours for three days; her temperature became normal and she made a good recovery and retained her hearing.

A man with erysipelas of the face and head was delirious and required three persons to hold him in bed; his temperature was 105 Fah. The attending physician was giving drop doses of aconite alternated with chloride of iron and applying nitrate of silver locally. As a consultant veratrum minims xxx. aqua oz. iv. m, Sig: One dram every thirty minutes for four hours then every hour. Bathed his face and head with veratrum oz. ss. aqua Oi every half-hour for two hours, when the temperature fell, delirium disappeared, and he recovered. Antiseptics or fluid medicines may be combined with veratrum as well as with calendula.

I prepare a solution for preventing and controlling inflammation due to bruises, lacerations, gun-shot wounds and felons that have been poulticed too long as: ℞ Veratrum ℥ii, belladonna ℥i, phenol gtt. x, aqua oz. iv. M. Sig.: Apply four times the first day, three times the second and once daily thereafter.

For the intense pain from a sprain, wring out a thick folded cloth in a solution of veratrum oz. 1, salacylic acid oz. ss, bicarbonate of sodium oz. ss, aqua oz. Apply and well wrapped with dry cloths to remain on for twelve hours, which relieves better than an injection of morphine.

IRRIGATING THE BOWELS

Florence Stir Smith, M.D., Newark, Ohio.

In all beginning sickness of children be it what it may, I find it lessens the severity of the illness by at once irrigating the bowels with warm salt solution. It reduces the temperature from one to two degrees; removes the poison from the bowels and by absorption stimulates the kidneys.

If there is vomiting it starts peristalsis and more quickly unloads the stomach and small intestines of undigested food, by the way of the bowels; promotes secretions and quiets the nerves.

You can accomplish in a few hours what would require two or three days to do in the way of elimination, and the child is then more able to fight the disease.

The salt solution also strengthens the blood current, pain is relieved by

relieving the distension of bowels and in pneumonia there is more breathing space for the already hampered lungs.

In diarrhea it relieves the bowels and gives the child many hours of rest it would not otherwise get.

I always use a fountain syrings with catheter attached, passing the catheter almost full length, depending upon age, in the bowels, allowing the water to run very slowly so it will be retained for some time.

In severe sickness I would not hesitate to use the irrigation every four to five hours and in a severe case of pneumonia, complicated by influenza, I used a continuous irrigation for three hours when the temperature went to 106°. The temperature came down and never went above 104° after that afternoon. I felt the salt solution saved the child's life.

After irrigating the bowels the child will often perspire freely and go to sleep. I medicate the same as I would do otherwise and feel that the system gets the benefit of the medication at once.

Where there was continuous vomiting, I would allow the stomach to rest and depend on the salt solution to sustain the child until it could retain the medicine.

BRYONIA.

E. G. Sharp, M.D., Guthrie, Okla.

Bryonia Alba. Habitat, Central Europe. Genus Cucurbitacia.

Bryonia is one of our most valuable remedies in all affections of serous surfaces and serous membranes. It is doubtful if I can offer anything original in regard to it, as its medical virtues were very well developed by the earlier Eclectics. It comes principally from Central Europe and England.

Prof. Locke gave its physiological action as excitant of the peripheral nerves and capillaries, producing symptoms of inflammation and irritation. His indications for it were absorption of inflammatory or serous exudation.

Scudder: Hard pulse; pain in frontal or orbital region; flushing of right cheek; irritating cough with pain and soreness; pain of serous membrane, aggravated on motion.

Ellingwood mentions bryonia, in large doses, as hydragogue cathartic, sometimes causing inflammation of stomach and bowels, and gives its specific indications as acute inflammation in chest, with hard pulse; short, quick, harsh cough; acute pain, increased on inhalation and on motion, serous or synovial inflammation. He says it opposes pus formation and the breaking down of tissue.

Bryonia is the very best remedy in pneumonia. In affections of serous and synovial membranes I think it is without doubt the best remedy known. In inflammations of serous membranes when fever is most pronounced combine with aconite.

It is the remedy for sharp cutting pleuritic pains in pneumonia. It is

also valuable for the cough of pneumonia and especially so in the cough of bronchopneumonia with frothy and bloody expectoration.

It is also of value in those cases where there is expectoration of a tenacious mucus.

I believe bryonia to be the most valuable remedy in the materia medica to prevent empyema if given early and continuously in pneumonia. I give not exceeding gtts. x specific medicine to water four ounces, teaspoonful doses often repeated. In the earlier stage of pneumonia I combine with the small dose of aconite. If skin is dry and harsh, with severe pleuritic pain, I add or alternate with asclepias. In pneumonia with marked passive hemorrhage I use ipecac in conjunction with bryonia. I can hardly conceive of a case of pneumonia in which bryonia is not indicated.

ECHINACEA AUGUSTIFOLIA.

J. E. Callaway, M.D., Chillicothe, Mo.

When a boy in the early 40's we lived in Illinois in a prairie region, one hundred miles south of Chicago. My father possessed a copy of Dr. Samuel Thompson's book on the practice of medicine. He learned how to treat his own family and was often importuned to treat his neighbors when sick, so much so that he soon became familiar with the different roots and herbs that grew in the prairies and timber lands of that country and gathered them at the right time of the season and kept a supply for emergencies. I, being a lad five to seven years of age, took much interest in learning to know the different remedies he gathered and used. Among them I call yet to mind very vividly lobelia, bone set (eupatorium perfoliatum), hydrastis canadensis (yellow pocoon), sanguinaria canadensis (red pocoon), blackroot (leptandra Virginica). We did not use mandrake (mayapple, podophyllum), then too harsh, and gentian root. There was one plant of the snakeroot family my father called colic root. This grew mostly in low, wet prairie lands, one stem one and a half to three feet high, rather long leaves, top tassellated, red or pink flowers; the root was the part used, about the size of a man's thumb, covered with hairy growth; root when cut open revealed little cells large as big pin's head filled with a thick, oily substance. This oil is the medicinal part used. My father was subject to colic and always carried some of this root in his vest pocket and would chew it and swallow the saliva impregnated with the oil. Always a sure cure for pain in stomach or bowels. I have told many people of this remedy, pointed it out to them on the prairies, and they used it as a family remedy, and also made a strong decoction of it to drench horses with colic.

But I started out to tell you of the best general, all-round remedy in the wide, wide world for a multiplicity of ailments—echinacea augustifolia. I first used this remedy in the treatment of typhoid fever. I was called in the country twenty years ago to see a family severely afflicted with this disease; two members of the family, a young man and woman, brother and

sister, just blooming into manhood and womanhood, had very recently died in the family under the care of an old-school physician. I found the father, a son and daughter, all three down with the same disease, ideal typical cases of typhoid , with the eruption, abdominal tympany, and temperatures running from 101 to 105 afternoons and fore part of nights, tongues beefy red, brown and dry, more or less delirium. I began by ordering a general clean-up of the premises, cleansed alimentary canals thoroughly by giving Epsom salts, and kept this up sufficiently often to keep digestive organs open.

Diet.—Oat meal and hot, sweet milk, all they wanted, oranges and lemons used as wanted, boiled cold water freely. Aconite, veratrum, eupatorium perfoliatum, macrotys and any other remedy indicated, all as needed; but my sheet anchor, my unfailing dependable remedy to counteract the poison was, and is yet today, echinacea augustifolia. To adults, in treating fevers especially, I administer fifteen to thirty drops every three hours, younger people three to fifteen drops, same intervals. Always given in cold boiled water, lemon or orangeade. I have not lost a case of fever, any variety, any age, with this line of treatment followed with proper tonics as required.

I administer echinacea freely in any case having bad breath, from ten to sixty drops after meals or before eating as patient prefers. I use it externally and internally in treatment of skin diseases. In treatment of syphilitic troubles you will find this remedy will cure your cases quicker than any other remedy in general use. I use it in cases of insect bites and stings, snake and spider bites, in cases of itching surface, applied externally, 10 to 25 per cent. diluted in water or hamamelia distillata; sponge parts affected, I used echinacea in all cases of influenza and pneumonia during last epidemic without a single fatality in one hundred and twenty cases (last winter). I have treated many cases of appendicitis and depend on this remedy mainly. Same in diseases of digestive organs, as they almost invariably have foul breath. This remedy corrects such dyscrasias. If there is such a thing as an elixir of life, echinacea is its name. You want the *best made,* and that from the dried root as manufactured by the Lloyd Brothers, Cincinnati. I have tried that made by other pharmaceutical houses that did not have the taste and peculiar twangy sensation on tongue and mouth as that made by Lloyd Brothers or the William S. Merrell Co. These are the best, and I have tested many.

Five years ago I became subject to sciatica, a pernicious cough with copious expectoration. Weight ran down to one hundred and twenty pounds, was weak and anemic. I cured myself by taking a liberal dose of a compound made of Epsom salts, chloride of sodium and phosphate of soda, one to two drams *every morning* in all the hot water I could drink, to keep bowels open and urinary organs flushed. This is taken half an hour before breakfast. At the same time I began taking one dose of fifteen drops of echafolta, mixed in hot water, before meals, gradually increased to thirty drops. For the last four years I have taken one dram (sixty drops) of echinacea, before breakfast only, *every day.* I now weigh one hundred and

thirty-eight to one hundred and forty pounds, have no aches or pains. My general health is perfect for a man of my age. Would advise any man or woman that requires a good nerve tonic and blood remedy to take thirty to sixty drops of Lloyd's specific medicine echinacea, in all the hot water they can comfortably drink, once, twice or even three times a day. This will put the pep into your personality. Don't grow old prematurely. Exert your God-given will power, be genial, smile and stay young.

You will find echinacea the very best remedy as a general blood purifier in the treatment of any diseased condition; especially indicated in diphtheria with subculoyd lobelia hypodermically. I use it in summer complaint among children. I give it in fresh cold water to baby chicks to prevent white diarrhea. A 50 per cent. solution will cure roup in chickens. Spray head and throat once or twice a day thoroughly. Put it in their drinking water—no other drink unless it be buttermilk.

VERATRUM VIRIDE, OR AMERICAN HELLEBORE.

W. E. Daniels, M.D., Long Beach, Calif.

It seems almost superfluous for one to write or call the attention of Eclectics to this drug, but anything that savors of Americanism ought to attract our attention. It used to be, if one wanted to attract attention or make a great hit with the ordinary American audience, all he had to do was to wax eloquent and get on the "water wagon" and he was sure to strike a popular chord, so I venture on this American drug.

It is very unnecessary for me to enter into a description of the plant or when or where it grows or how it looks. Suffice it to say it is a North American plant, grows in low, swampy ground, flowers in June or July, and grows three to five feet high.

It is said to be very poisonous if taken in overdoses, and I think it would be were it not for the fact that if an overdose is taken the patient invariably vomits and the trouble is over, especially if heat is applied and any stimulant is given. The action of the drug passes away in about four hours. It is best to give it in one fourth to one-half drop doses every one-half to one hour according the the urgency of the case.

It is one of our *positive* remedies, and if given in proper doses and in the indicated cases we are sure of results. There is no uncertainty in its action.

It is said to be indicated in all sthenic fevers, but in my hands I give it in practically all cases when I have high fever if I have the case in the beginning of the attack.

When the pulse is feeble and rapid veratrum, with me, will slow the heart and increase its strength. It should be remembered that veratrum is quite like the coaltar derivatives, but is more dependable and more easily controlled, and does not leave the patient in that weakened condition and with a feeble heart.

If there is one remedy that will abort pneumonia and cut short any in-

flammatory condition, that remedy is veratrum, and if the case is seen early, twenty-four hours will put your case on the road to recovery. It should be given until the pulse goes down to 70 or even 60 and held there for several hours. Temperature will drop from two to five degrees, but there will be no danger if the patient is kept warm and with plenty of refreshing drinks and fresh air—not a draft or a freezing room, but a well ventilated room, and the air need not be *freezing cold, as some advocate.*

I need not dwell on its use in pleuritis, bronchitis and meningitis, associated with gelsemium and echinacea.

In erysipelas I give it internally and apply it combined with equal parts of echinacea and spirits of nitre. Apply several times a day.

In gonorrhea it is my first remedy, associated with gelsemium and bicarbonate of soda. In my early days I think it was Prof. Lloyd who taught us that veratrum viride should never be given in an alkaline solution. We were also taught to not give pepsin in an alkaline solution, but years of experience has taught us the fallacy of that statement, for we now use both remedies with any alkali and get good results. The objection to such a combination is that the alkali is apt to precipitate the active principle of the drug and unless care is taken to shake the bottle well the patient is apt to get an overdose with the last, but in gonorrhea it cures most of my cases without resorting to injections.

It is a fine alterative, and in the secondary stage of syphilis is one of our best remedies. In several cases when I have had the case in the first weeks before the secondary symptoms developed I have used veratrum in quite large doses associated with echinacea, and the secondary symptoms never appeared or in a very light form. In one case especially I used echinacea hypodermically every other day and gave it in 15 to 20 drop doses with two or three drops of veratrum after meals and bedtime, and we never had the least sign of the secondary symptom; but one swallow does not make a summer, but it is worth your while to investigate.

If there is any class of diseases that cause the ordinary doctor trouble it is skin diseases, and there is no remedy that will cure more of the ordinary skin troubles, especially those of an inflammatory nature, than veratrum. It is practically a specific in impetigo if applied frequently, or keep the parts covered with cotton wet with a solution of veratrum, echinacea and spirits of nitre. It will abort boils, and a few applications will cure the ordinary stye if pus has not formed. Felons, if pus is not present, will yield to its curative effects in short order.

In fact, if I were to be deprived of every drug but one that one would be veratrum viride, and I would cure more of the ills of humanity than with any other drug I know. Study its action. Use it wherever you can and you will be pleased with its curative action.

I use almost wholly the specific medicine veratrum and occasionally Norwood's tincture. There may be other excellent preparations, but I have never used them except Merrell's fluid extract from the green root. Use a good reliable preparation or none at all.

SCHEDULE OF EXAMINATION AND QUESTIONS OF THE INDIANA STATE BOARD OF MEDICAL EXAMINATION AND REGISTRATION.

Tuesday, February 10, 1920.

9:00-11:00 a. m.—Surgery. Dr. Dinnen.
11:00-11:30 a. m.—Neurology. Dr. Dinnen.
11:30-11:45 a. m.—Medical Jurisprudence. Dr. Dinnen.
11:45-12:00 a. m.—Ophthalmology and Otology. Dr. Canfield.
1:00-3:00 p. m.—Physical Diagnosis. Dr. Canfield.
3:00-4:00 p. m.—Gynecology. Dr. Canfield.
4:00-5:00 p. m.—Hygiene and Sanitation. Dr. Caine.

Wednesday, February 11, 1920.

9:00-10:00 a. m.—Chemistry. Dr. Dinnen.
10:00-12:00 a. m.—Anatomy. Dr. Caine.
1:00-3:00 p. m.—Pathology and Bacteriology. Dr. Spurgeon.
3:00-5:00 p. m.—Physiology. Dr. Spurgeon.

Thursday, February 12, 1920.

9:00-11:00 a. m.—Materia Medica and Therapeutics. Dr. Canfield and Dr. Smelser.
11:00-1:00 p. m.—Theory and Practice. Dr. Smelser.
1:30-3:30 p. m.—Obstetrics and Pediatrics. Dr. Gott.
9:00-12:00 a. m.—Midwives. Dr. Gott.

Tuesday, February 10, 1920.

Surgery.

1. Give symptoms, diagnosis and treatment of phlebitis.
2. Give etiology, diagnosis and treatment of Pott's disease.
3. Describe treatment of empyema.
4. Define genu valgum and give treatment of the condition.
5. Give the causes and treatment of acute prostatitis.
6. Name and diagnose the four possible dislocations of the hip joint.
7. Differentiate a dislocated shoulder from a fracture of the head of the humerus.
8. Give the causes of septicemia and tell how it differs from pyemia.
9. Define volvulus and give treatment.
10. Give diagnosis and treatment of floating kidney.

A. B. Caine, D.O.

Sanitation and Hygiene.

1. Give the hygienic and sanitary care of a case of scarlatina.
2. (a) Why is carbon dioxide injurious to health?
   (b) Discuss the hygienic care of the skin.

3. Discuss the means by which infectious and contagious diseases are transmitted.
4. Discuss fully the cause, transmission and prophylaxis of malaria.

A. B. CAINE, D.O.

Ophthalmology and Otology.

1. (a) Give causes of chronic glaucoma.
   (b) Give diagnosis.
   (c) Give treatment.
2. Give origin of acoustic nerve, and its distribution in the labyrinth.
   (b) Give diagnosis.
   (c) Give treatment.
3. (a) Give clinical symptoms of hyperemia of the labyrinth.

M. S. CANFIELD, M.D.

Medical Jurisprudence.

1. Is a surgeon legally liable for the negligence of his assistants?

Neurology.

1. What are the dangers of spinal puncture?
2. How would you make a diagnosis of epidemic meningitis?

Surgery.

1. Give technique of supra pubic prostatectomy.
2. Give diagnosis of stone in kidney and indications for removal of kidney.
3. Give technique of anterior gastro-enterostomy.
4. Give technique of cholecystectomy.
5. Give indications for decompression operation on skull.
6. Give diagnosis of perforated gastric ulcer. Give technique of operation.
7. Give indications for open operation for fracture of femur.
8. What is meant by good "surgical risk"?
9. Give differential diagnosis of gall-stones, appendicitis, and stone in kidney.
10. What is meant by a "cold abscess"? DINNEN.

Gynecology.

1. Give the blood and nerve supply of the uterus and ovaries.
2. Define vicarious menstruation. Define menorrhagia, metrorrhagia, amenorrhea, dysmenorrhea.
3. Define, give etiology and treatment of vaginismus.
4. Give symptoms and treatment of uterine carcinoma.
5. Give the etiology, diagnosis and treatment of cysts of Bartholin's glands.

A. B. CAINE, D.O.

Gynecology.

1. (a) Give symptoms of vaginismus.
   (b) Give treatment.
2. (a) Give causes of chronic purulent salpingitis.
   (b) Give treatment.

3. (a) Give preparation of a patient for an abdominal operation.
   (b) Give after-treatment of a patient for an abdominal operation.
4. (a) Give diagnosis of general septic peritonitis.
   (b) Give prognosis.
   (c) Give treatment.
5. (a) Give cause of thrombosis of the femoral vein. (Phlegmasia alba dolens.)
   (b) Give treatment. (Phlegmasia alba dolens.)
6. (a) Differentiate shock from hemorrhage.
   (b) Give treatment of shock. M. S. CANFIELD, M.D.

Physical Diagnosis.

1. Give pathological physiology of valvular defects.
2. Give physical signs of aortic regurgitation.
3. Give physical signs of pericardial effusion.
4. Give diagnosis of incipient tuberculosis.
5. Give physical signs of hydrothorax.
6. Give differential diagnosis of pleuritic effusion.
7. Give topographical anatomy of the spleen.
8. Give diagnostic results of physical examination of the liver and gall-bladder.
9. (a) Give symptoms of cancer of the stomach.
   (b) Give differential diagnosis.
10. (a) Give physical signs of aneurysm of the thoracic aorta.
    (b) Give differential diagnosis. M. S. CANFIELD, M.D.

WEDNESDAY, FEBRUARY 11, 1920.

Chemistry.

1. Give formula for phenol and ethyl alcohol.
2. Give technique of Wassermann test.
3. What is a normal saline solution? Give percentage.
4. Give quantitative test for sugar in urine.
5. What are xanthin and purin bases?

Anatomy.

1. Name the three great classes of joints, with an example of each.
2. Give the origin, course and distribution of the median nerve.
3. Describe the refracting media of the eye.
4. What is meant by the portal system? Describe it.
5. Describe the "Y" ligament, giving its attachments.
6. Name the parts of the sternum, its purpose and the muscles attached to it.
7. What muscles form the calf of the leg? Give origin and insertion of them.
8. Describe the microscopical appearance of a section of long bone.
9. Describe the esophagus as to size, location, relation to other structures, and its blood supply.
10. Name the branches of the subclavian artery. A. B. CAINE, D.O.

Bacteriology (Answer any five questions).

1. What pathologic conditions are caused by the various types of the pneumococcus?
2. Describe the morphologic and cultural characteristics of the bacteria found in erysipelas.
3. What are extracellular bacterial toxins?
4. How would you immunize an adult against typhoid fever?
5. What are the conditions that favor proliferation of the tetanus bacillus within the tissues?
6. What are the micro-organisms that cause disease of the tissues about the roots of the teeth?

Pathology.

1. Describe the characteristics of a melanosarcoma.
2. Describe the pathologic condition present in tuberculosis of the urinary bladder.
3. Write on myxoma. (a) Define. (b) Give cause. (c) Usual situations.
4. Name a number of forms of disease due to bacteria, and mention the bacteria causative of each form.
5. Name in the order of frequency the mechanical cause of icterus.

W. A. SPURGEON, M.D.

Physiology.

1. Name the elementary structures of which the organs and tissues of the body are made up.
2. Write on the blood: (a) Physical properties; (b) specific gravity; (c) color; (d) normal temperature; (e) reaction; (f) quantity; (g) function.
3. Write on the nervous apparatus of respiration: (a) Respiratory center; (b) automatic and reflex nerves of respiration. What particular condition stimulates the respiratory center?
4. Write on foods, giving the two classes, with subdivisions of each class.
5. Give the special digestive functions of the small intestine in their order, as relates to the digestion of (a) fats, (b) albuminous substances, (c) starchy foods, (d) saline and saccharine matter.
6. Name the structures through which absorption may take place.
7. Write on glandular metabolism as relates to secretion and excretion, giving the difference between the two processes and their products.
8. Name the portion of the brain, or the organ for the co-ordination of the voluntary movements.
9. Name the conditions or circumstances leading to (a) increased flow of blood; (b) diminished flow of blood.
10. Write on the elasticity of arteries; (a) purpose served; (b) result if elastic properties be diminished or lost.

W. A. SPURGEON, M.D.

THURSDAY, FEBRUARY 12, 1920.

Materia Medica and Therapeutics (Eclectic).

1. Differentiate between the physiological and therapeutic action of drugs.
2. (a) What is incompatibility?
   (b) Name two drugs which are incompatible.
3. (a) What is an antidote?
   (b) Give illustration.
4. (a) What is a midriatic?
   (b) What is a miotic?
   (c) What is an anesthetic?
5. What tissues or organs are impressed by (a) hydrastis, (b) phytolacca, (c) ergot, (d) macrotys?
6. Give specific indication for (a) digitalis, (b) aconite, (c) chionanthus.
7. Write a prescription in which tr. bryonia and tr. veratrum are ingredients, and state specific condition for which this prescription would be used.
8. Give treatment for a child 6 years of age who had taken an overdose of morphin.
9. (a) Give indications for rhus tox; (b) give indications for sodium sulphite.
10. Give antidote for carbolic acid.

M. S. CANFIELD, M.D.

Medicine (Eclectic).

1. (a) Define anterior poliomyelitis; (b) give etiology; (c) give treatment.
2. (a) Define variola; (b) give etiology; (c) give differential diagnosis; (d) give treatment.
3. Diagnose tricuspid insufficiency.
4. Give diagnosis and treatment for cystitis.
5. Give diagnosis and treatment for nephritis.
6. (a) Give diagnosis for lead poisoning; (b) give treatment.
7. What is specific medication and specific diagnosis as practiced by Eclectic physicians.
8. Differentiate between a typhoid ulcer and tuberculous ulcer of the small intestines.
9. Give treatment for a patient suffering with continual pain in the lumbar region and a constant temperature of 96, respiration 20, pulse 60. Urine normal.
10. What is indicated in the following case: Patient has pallid skin, feeble circulation, with hemorrhage; pale tongue, with slight coat, lifting in patches; humid, doughy abdomen?

M. S. CANFIELD, M.D.

Materia Medica and Therapeutics (Regular).

1. Define official preparations as applied to preparations of medicinal agents.

2. Define specific medication.
3. How does an antagonist differ from an antidote?
4. How would you perform artificial respiration?
5. What therapeutic agents would you use to increase the action of the skin?
6. What therapeutic agents would you use to increase the renal action?
7. Explain how antitoxin causes immunity and effects cure and the methods of administration as a prophylactic and curative agent.
8. Mention the therapeutic uses of creosote.
9. Mention the therapeutic uses of iodine.
10. What do you regard the safest and most efficient antipyretic?

S. G. SMELSER, M.D.

Internal Medicine (Regular).

1. Differentiate neuritis from rheumatism.
2. Differentiate gastric cancer from gastric nephritis.
3. Give etiology, symptoms and treatment of acute nephritis.
4. Give the period of incubation and of eruption of the exanthemata.
5. Give the treatment and prognosis of erysipelas.
6. Give diagnosis and treatment of lobar pneumonia.
7. Give diagnosis and treatment of diphtheria.
8. Disease of what organs is dropsy most commonly a resultant?
9. Where is the aortic regurgitant murmur most distinctly heard?
10. How would you treat pulmonary hemorrhage?

S. G. SMELSER, M.D.

Principles and Technique of Osteopathy.

1. Give your technique for the control of diarrhea. Enuresis.
2. Are contracted muscles the result of cold, or vice versa? Discuss your answer.
3. Discuss acute articular rheumatism, its cause and treatment.
4. Define primary, secondary, flexion, extention, anterior, posterior and lateral as applied to a lesion.
5. Differentiate interstitial nephritis from parenchymatous and give treatment of each.
6. Why do patients with some organic disease often suffer pain in a certain area of the spine.
7. Give the differential diagnosis between an anterior and a posterior occipital lesion.
8. Give etiology, diagnosis and treatment of acute gastritis.
9. Give detailed treatment of chorea.
10. Diagnose and treat a sacro-iliac lesion on the right side.

A. B. CAINE, D.O.

Theory and Practice of Osteopathy.

1. Mention the essential details of an osteopathic diagnosis.
2. In a case of antointoxication due to an enteroptosis, what is your treatment?

3. Give diagnosis and treatment of typhoid fever.
4. What is the osteopathic theory of fighting the invasion of the body by an infectious disease?
5. Give etiology, prognosis and treatment of anterior poliomyelitis.
6. Give in detail your treatment of influenza.
7. Give method of adjustment of subluxated third rib on the right side.
8. Give the causes and treatment of palpitation of the heart.
9. Give etiology and treatment of goiter.
10. Give the etiology and treatment of hyperchlorhydria.

A. B. CAINE, D.O.

Obstetrics.

1. Describe the mechanism of labor in L. O. A. presentation.
2. Give indications for the use of forceps.
3. What are the signs of pregnancy? Give the relative value of each sign mentioned and the time of its appearance.
4. What are the symptoms of inevitable abortion? Give treatment.
5. Give the diagnosis and treatment of a transverse presentation.
6. Define inversion as applied to the uterus. Treatment.
7. Give diagnosis and treatment of ectopic gestation.
8. Describe and give uses of the liquor amnii.
9. State the causes and treatment of puerperal eclampsia.
10. Give the detailed management of the third stage of labor.

Obstetrics

1. Pregnancy: Describe the changes in the maternal organism induced by pregnancy.
2. Premature induction of labor: Give indication for inducing and method that should be employed.
3. Abortion: What effect will frequent induced abortion have upon the normal human female?
4. Monstrosity: Give cause and management.
5. Puerperal sepsis: Give early symptoms and treatment.
6. Pernicious vomiting of pregnancy: State the cause and give treatment.
7. Caesarean section: (a) Define; (b) give technique.
8. Version, external and internal: Give procedure in each and contra-indications.
9. Extra uterine asphyxia: Give etiology, pathology and treatment.
10. Hernia funiculi umbilicus: Describe the clinical appearance and give diagnosis and treatment.

DR. GOTT.

Pediatrics.

1. Define rachitis. Give etiology, prognosis and treatment.

DR. GOTT.

Midwifery.

1. Give the name of each stage of normal labor.
2. Give the early symptoms of puerperal sepsis and the treatment.

3. Describe the third stage of labor and the proper treatment.
4. Give the care and management of an infant born at the seventh month.
5. (a) When is a presentation said to be normal? (b) Name two forms of abnormal presentation.
6. (a) Describe the human female pelvis. (b) How does it differ from the male pelvis?
7. Give indications for use of forceps in labor.
8. Give the cause and proper treatment of an abscess of the breast in the nursing mother.
9. Give the cause and treatment for infantile sore eyes.
10. (a) What would flooding before the birth of child lead you to suspect? (b) What treatment should be employed in such a case?

THE RELATION OF BLOOD CHEMISTRY TO INTERNAL MEDICINE.

Carll S. Mundy, M.D., Toledo, O.

In the last few years medical literature has been virtually flooded with a mass of writings upon the subject of blood chemistry. While a knowledge of the chemical constituents of the blood is by no means new, yet it has remained for more recent investigators to so perfect and simplify our laboratory technique as to make possible and practical a clinical examination of the blood. As a result much has been learned of the variations of certain of these elements in disease, most noteworthy of which are sugar, uric acid, urea and creatinine. Rather than present one or two cases, it has seemed more fitting that I should attempt to review the more recent literature on this subject and present what seemed to be the more salient and practical features.

The blood sugar content of the normal individual varies according to different authors from .07 to .14%, the average being from .08 to 12%. In the normal individual it is subject to a slight variation, depending upon the time of day and diet. This so-called constant level is maintained by the glycogenetic and glycolytic functions of the liver. The normal height to which the blood sugar level may rise before the kidneys become permeable and glycuresis begins, or the renal threshold for sugar, varies with different observers, the average figures given being .17 or .18 per cent. The blood sugar level, which should be taken in the morning before breakfast, the determination of the renal threshold, and the variation in the blood sugar level following the ingestion of known quantities of glucose, or the alimentary glycemia test furnish important information in a number of conditions.

According to Williams and Humphreys, the blood sugar level in nephritis may be divided into two groups. First in the early stage in which there in little disturbance of metabolism, the blood sugar will be normal. Secondly, in the late stage it is found raised, and in uremia it is high,

often equaling figures found in severe diabetes. In such cases the other metabolic constituents of the blood are high, presenting a picture of complete metabolic failure. The failure of nitrogen metabolism, however, precedes sometimes by months the rise in blood sugar. This furnishes a serious prognostic omen. In such cases of nephritis there is sometimes a glycosuria, which should not be interpreted as a diabetes. These conditions are not benefited by restriction of carbohydrates. There is another group of cardio-vascular cases, characterized by high blood pressure and little or no renal involvement, in which a hyperglycemia is found. These are probably due to some disturbance of endocrine control.

The method outlined by Brailey for the alimentary glycemia and glucuresis test is briefly as follows: A light supper in the evening, and early morning specimen of blood and synchronous urine, followed by the ingestion of 1.75 gm. of glucose per kilogram of body weight. The glucose is given in 2.5 c.c. water per gram. Specimens of blood and urine are taken in half hour, one and two hours following. In normals the blood sugar rises rapidly to .15 or .20%, usually reaching its height in the first half hour, and falls approximately normal in one to two hours. The sugar in the urine parallels that in the blood up to the latter's concentration of .16 or 17%, when the kidneys begin to actively excrete. (The urine sugar is estimated by the Benedict test.)

In renal glycosuria the blood sugar level and curve are normal, the reducing substances being present in the urine. The amount of sugar excreted bears no relation to the blood sugar level. In cases of disturbed carbohydrate metabolism the curve rises higher, and the hyperglycemia is prolonged. The extent to which it is prolonged is something of an index of the condition, signifying either an advanced condition or a renal complication. In nephritis the curve is usually delayed in its rise and prolonged.

These tests are quite important in all cases of glycosuria, furnishing an effective means of differentiating between a diabetes and renal glycosuria. The latter condition is by no means as rare as has formerly been thought. It is essential at least for the comfort of the patient that such a differentiation be made, for if one may judge from the literature there is an apparent absence of harm from unrestricted diet and excessive glycosuria, and certainly no benefit from strenuous dietetic measures. Other practical points of value to be gained from these tests may be summarized as follows:

The threshold for sugar is low in young diabetics, and rises as the case advances or with renal complications. A rising threshold in spite of diabetic measures is serious from a prognostic point of view. The blood sugar level is of value in the dietetic management. Patients do better if their sugar level is kept below .15%, as higher levels tend to promote exhaustion. In old diabetics with a high threshold, they are

often sugar free, and yet in a serious condition. For these reasons frequent morning blood and synchronous urine specimens should be taken in these cases.

When a complete blood examination is required, one usually takes 25 c.c. This is sufficient for the Wassermann, sugar, uric acid, urea and creatinine. Of these the uric acid is not only the most difficult test to make, but also the least important except in a few instances. When it is not required, a little over 15 c.c. of blood is sufficient for the remainder. The source of uric acid in the body is partially exogenous from the purine containing foods and partially endogenous. It is present in the blood of normals in from 1 to 3 mg. per 100 c.c. It is of interest to the clinician because of the fact that it is the first of the last three metabolism products mentioned to be retained by the kidneys. In any condition in which there is impaired renal function the kidney becomes partially impermeable to these substances successively, first to uric acid, secondly to urea, and finally to creatinine. They are accordingly found in increased amounts in the blood, either the first, uric acid and urea, or all three, depending on the degree of impairment. The two most noteworthy conditions in which uric acid is found increased, are gout, in which it is greatly increased, and nephritis. In the early stages of the latter condition it is of great value as an indication of early impaired renal function, and is said by Mosenthal to be even more delicate as such a test than the test meal he devised. Because of its partial exogenous source it is influenced by diet.

The source of urea is entirely exogenous, being formed from the amino acids in the liver, and they from the proteins ingested. It is normally present in the blood in amounts varying from 20 to 40 mg. percent. It is the second of the substances to be retained when renal function is impaired. Its estimation is of value in nephritis, not only as an index of the degree of impaired function but as a control of dietetic measures. In moderately severe cases it responds rather promptly, probably because of its exogenous origin, and is in that respect the most useful of the three determinations.

Creatinine is entirely endogenous in origin and is the last of these substances to which the kidney becomes impermeable. Accordingly it is most valuable from a prognostic point of view. It is normally present in the blood in amounts varying from 1 to 2.5 mg. percent. Persistent amounts over 5 mg. may be regarded as indicative of an early fatal termination, even though the patient is not clinically in serious condition. Myers and Killian report a series of eighty-five cases with blood creatinine over 5 mg., eighty of whom died within one year after coming under observation. Of the remaining five, two had creatinine values which were temporarily over 5 mg. They conclude that a retention above 4 mg. does not occur until the activity of the kidney is severely impaired. Figures above this were usually accompanied by some urea

retention, while those above 3.5 were almost invariably so. Many cases with values under 4 showed some improvement, while of those above 4 mg. the reverse was true. As a prognostic test the amount of creatinine retention is even more reliable than the phenolphthalein test.

Of the four, blood sugar, urea and creatinine are most usually done. They should be made on all cases where a disturbance of metabolism, diabetes or nephritis is suspected, as they are valuable aids. Urea and creatinine tell the story of protein metabolism much more quickly and easily than the older and more cumbersome method of estimating total nitrogen intake and excretion. The nitrogen retention in the blood follows the nitrogen balance close enough for practical clinical purposes. While one should not disregard all other tests, yet these furnish most reliable information with regard to impairment of renal function, thus differentiating, for example, between a chronic interstitial nephritis and an essential hypertension. One example might be cited: A man, age 60, was seen first in October. At that time he had a BP of 240/150, was dyspneic and edematous to his waist; urine heavily loaded with albumen and sediment, contained many hyalin and granular casts. His blood urea at this time showed considerable retention, being about 80 mg. per 100 c.c. After a week's treatment at home we succeeded in getting him into a hospital, where he was put on a 50 gm. protein diet. In two weeks he was discharged much improved. His dyspnea and edema had disappeared and his urea came down to within normal limits. (These figures not at present available.) His phthalien output at the time of discharge was 25% in two hours and ten minutes. The urine still showed albumen and casts. The 16th of February he became unconscious some time during the night. When seen the next morning he had evidence of a cerebral hemorrhage; yet with his past history a uremia with cerebral edema could not be definitely ruled out. The blood urea taken that morning was 29 mg. and the creatinine 2.03 mg. per 100 c.c. The urine still contained albumen. A definite hemiplegia developed and the patient expired without regaining consciousness.

Summary: The subject of blood chemistry in recent medical literature is so voluminous that it seemed fitting to review it and present the more practical features.

The sugar content furnishes important information, being high in late stages of nephritis and certain cardiovascular conditions. The alimentary glycemia test differentiates between renal glycosuria and diabetes, and frequent blood examinations are of benefit in controlling diet and from a prognostic point of view. Uric acid, urea and creatinine become successively increased in the blood as impairment of renal function advances. Uric acid furnishes a delicate index of early impaired function and creatinine a reliable prognostic test. The urea content is a valuable index of nitrogen metabolism. Of the four tests, blood sugar, urea and creatinine are most important and should be done on all cases where a disturbance of metabolism, diabetes or nephritis is suspected.

DISEASES OF THE UPPER RESPIRATORY TRACT.*

JOSEPH COLEMAN, M.D., NEW YORK CITY.

I wish to state at the outset that in this article I present nothing original, but am satisfied to refresh your minds upon what you have already seen elsewhere. Since thinking the subject over, and in order to present it to you from the viewpoint in which you are most interested, that is, the interpretation of symptons referable to the respiratory tract, and with which you are brought in daily contact, I will interpret such symptoms to you from the standpoint of the laryngologist. Obviously it would be impossible in the short space of time allotted to me to take up each of the diseases of the respiratory tract which are associated with remote symptoms. When you consider that almost all the acute infections, as well as many chronic ones like syphilis and tuberculosis, that all the dermatoses, and many of the neuroses, mediastinal disease and the malignancies, are very prone to manifest themselves in this region, I think you will agree with me that the course I have set out in presenting to you an interpretation of the most prominent symptoms will be more satisfactory.

The longer one studies the diseases to which the human system is prey the more one is impressed by the exceedingly intimate relation of one portion of the organism to another; or, in other words, the dependence of one organ upon another. The healthy performance of the functions of one class of organs rests upon the normal condition of almost every other organ in the body.

It is my privilege to discuss first the question of headache in its relation to diseases of the nose and throat. Permit me, for the sake of simplicity, to classify headaches into first, such as are due entirely to nasal or nasopharyngeal disease, and, second, those produced by several factors, one of which is situated in the nose or throat. As a general rule, it may be said that when headache is present on awakening this speaks in favor of nasal origin. When it occurs later in the day after using the eyes a great deal, it is probably attributable to some ocular affection. Another general rule is this: If cocainization or adrenalization of the nose diminishes the headache, its nasal origin is the more likely. If we now ask what affections will produce headache, the answer is that almost every pathological condition in the nose is apt to be a cause; for example, a deviated septum, polypi, hypertrophied middle turbinate. An examination of the nose therefore—I say this emphatically—should never be neglected in any form of intractable headache. Hypertrophic conditions which cause contact of two mucous surfaces, at the same time make pressure on the ophthalmic and superior maxillary divisions of the fifth nerve, are one important cause. Other causes are disturbances within the nasal accessory sinuses, especially in instances where drainage of the sinuses is obstructed by enlarged middle turbinate or a deviated septum, jamming the middle turbinate like a cork against

* Read before the Eclectic Medical Society of Greater New York.

the ethmoidal wall. Under these circumstances, the cavities are shut off from the nasal chambers, natural ventilation ceases, the air within the sinuses becomes rarified, giving rise to retention of gases, swelling of the mucosa, etc.

This brings us to another group of headaches, namely, those due to purulent affections of the accessory sinuses. In this category we find represented all classes of focal and general headaches.

Persistent pain in the supra-orbital regions, intensified by pressure, should bring to your minds two conditions—acute frontal sinusitis and supra-orbital neuralgia. The differential diagnosis is easily made by trans-illumination and radiography of the sinuses, and by tracing the location of purulent or muco-purulent discharges in the nose, if there be any such discharge. Pain in the nasal angle of the orbit, intensified by pressure or by the motions of the eyeball, especially downward, due to the pull of the superior oblique muscle, which is here attached to the very thin plate of bone which helps form the orbital floor of the frontal sinus, is almost pathognomonic of frontal sinusitis. Persistent pain in the parietal region suggests disease of the ethmoid, while diseased conditions of the sphenoid usually manifest themselves by occipital pains. By differentiating the location of the discharge, whether from the superior or middle meatus, by lavage, X-ray and trans-illumination, differential diagnosis is usually made without difficulty. Acute conditions of the antrum of Highmore cause pain below the orbit, often referable to the teeth, but the pain may also be frontal. Let me say, however, that to make a diagnosis as to which one of the sinuses is affected simply from the site of the pain would be a mistake, as it is by no means a sure sign. For instance, with empyema of the maxillary antrum we often find patients complaining of frontal, supra-orbital, or occipital headaches, while patients with chronic affections may never complain of the headaches, in spite of advanced changes in the cavities. In other cases, headache is a prominent symptom. In closing the topic of headaches, I wish to quote the words of Dr. Church of Chicago. "There is no process that requires more thorough and searching investigation than the origin of headaches, and there is no condition so unimportant that it can be overlooked in any case of headache."

Eye symptoms of nasal origin may be obstructive or inflammatory. Among the most common of the obstructive type is epiphora, due to pressure against the lower end of the lachrymal duct by an enlarged inferior turbinate, or by inflammatory changes at the mouth of the tube by the enlarged turbinate. Among the direct inflammatory conditions we find quite frequently optic neuritis or papillitis, secondary to chronic disease of the posterior ethmoidal sinuses. The optic nerve lies in close relation with the last posterior ethmoid cell, or the roof of the sphenoid sinus, and partial or total blindness may result. I have under my care at present a young woman of 20, who suddenly lost almost completely the sight of the right eye. Her vision was 4/200 in this eye. Examined by the oculist at the N. Y. Eye and Ear Infirmary, a diagnosis of retino-choroiditis was made. Wassermann negative. X-ray showed diseased condition of the right ethmoid and sphenoid. One week after I operated upon her, opening the posterior ethmoids

and taking down the anterior wall of the sphenoid, her vision was 100/200, and now, about three weeks after operation, her vision is almost normal.

Other symptoms referable to the eye are either exophthalmus or perforating fistula, caused by the breaking through of a confined ethmoiditis into into the orbit.

Next I wish to take up the study of coughs and their relation to the upper respiratory tract. Coughs may be either voluntary or reflex. I think as a general rule we may say that coughs which are not dependent upon irritation of the larynx, trachea or lungs may be classed as sympathetic or reflex coughs. I would define cough as a modified respiratory act, voluntary or involuntary, consisting of a preliminary inspiration, followed by one or more sudden expirations with a partially closed glottis, having for its object the removal of anything which causes irritation of the air passages. The sensation of irritation is usually referred to the region of the larynx, no matter whence its source. The first to give the subject of nasal cough its merited attention was J. N. MacKenzie, who demonstrated that cough was frequently dependent on intra-nasal disease, and could be produced by artificial irritation, even when there was no apparent pathological change in the nasal tissues.

Among the most frequent nasal causes of cough I may mention hypertrophied posterior tip of the inferior turbinate, vaso-motor rhinitis, and purulent disease of the accessory sinuses. The latter is one of the most frequent causes and represents nature's desire to get rid of pus that has dripped into the pharynx or trachea. I may say that secondary to the sinus disease, tracheitis or bronchitis often develops. In the pharynx among the most common causes are enlarged lingual tonsils, elongated uvula and hypertrophy of the lateral masses of the pharynx. Of laryngeal conditions, I may mention inflammatory conditions of the epiglottis or larynx, the inspiration of foreign material into the larynx or bronchial tree, cough due to aneurism of the aorta, and asthma.

I must say a few words, before closing this chapter of my discussion, on hay fever and asthma, or, as it is now called, hay-asthma. In the first place I wish to say what may seem rather startling to some of you, that it is now generally conceded that practically all cases of pure bronchial asthma—that is, those not cardiac or nephritic—are secondary to hay fever. In other words, that hay-asthma is a secondary infection of the bronchial tree, upon and due to a pre-existing hay fever. Hay fever, or, as it is otherwise known, pollinosis, is a disease which manifests itself in the spring, from the latter part of May or the early part of June to the early or middle part of July, and in the autumn from the middle of August to the end of September or early October. It is characterized by itching of the eyes and lachrymation, sneezing, serous discharge from the nose and obstructed breathing, itching of the palate and face, and, if the attack is severe, by coughing and difficult breathing, accompanied by wheezing. It is caused by the sensitization of an individual, by the conveyance of pollen contents through the respiratory tract. In 1898 Richet and Hericourt applied the name of anaphylaxis to a symp-

tom-complex of vomiting, diarrhea, respiratory distress and sometimes death, which was produced in animals by a sublethal dose of toxic protein. The condition is just the reverse of immunity, and represents an increased susceptibility. In hay fever patients there exists in all likelihood this individual susceptibility to this particular disease, which seems to have some relation to heredity. The susceptible person becomes ill from the action of the pollen contents on the respiratory tract. If a large dose of the pollen extract is injected subcutaneously into a susceptible individual, typical symptoms of anaphylaxis result. Pollen grains of many varieties are capable of producing this condition, and not all individuals are sensitive to the same pollen. The grasses, such as timothy, red-top, blue-grass and wheat, cause the early or spring variety, whereas goldenrod and rag-weed produce the late variety. The method I use in determining which kind of pollen is operative in a given case is to scarify as many points as there are varieties of pollen to be used, usually about five or six, about an inch apart on the arm or forearm, which of course is first thoroughly cleansed. Into these scarifications the different varieties of pollen are rubbed. A spot on the other arm is scarified, into which no pollen is rubbed, as this spot is used as a control to determine the amount of reaction due to the pollen. In a few moments a wheal will develop at and around the scarifications to which the patient is susceptible and varying in size according to the susceptibility to each variety of pollen used. The treatment consists in injecting with small doses of a very weak solution of the pollens giving a positive reaction, thus establishing a gradual immunity. I begin with a 1-100,000 solution, injecting one or two drops, gradually increasing same until the patient can stand pure pollen rubbed into the mucous membrane of the nose without reaction. The treatment covers a period of at least six weeks to two months, and the ideal time for beginning the injections is about ten weeks before the attack may be expected. Naturally the question arises whether such immunization is permanent. It is safe to say that while immunity may not be successfully carried over to the succeeding year, recurrences are much milder at least, and can probably be overcome the following year by a very few injections. In many cases of pure bronchial asthma, we find this same susceptibility to many food proteins, such as milk, egg white, egg yolk, many vegetables, etc. Determination of the causative agents is made in the same manner as described for hay fever. Results from this line of treatment have been by far more gratifying than under any other form of treatment.

I next wish to say a few words regarding the role of the teeth and the tonsils in the causation of arthritis, nephritis and acute anterior poliomyelitis.

That the absorption of chemical toxins from micro-organisms can and does produce serious pathological lesions in the organs, glands and joints of the body is an established fact and accepted by the medical man who is abreast of the latest research in experimental medicine. To have an acute tonsillitis the initial event of an acute rheumatic attack is so common that it is now generally accepted as a clinical fact, and, upon minute history taking, one will find it in the majority of cases. Tonsils are removed in children

on account of their size. They are obstructive mechanically. In adults the tonsil may be small, even to being completely submerged, yet be an infected, toxin-producing source of poisoning. Recent writers, employing better methods of examination of the teeth and tonsils, are finding many more cases of arthritis where these organs are diseased than formerly. Among the latest organisms to be studied in relation to arthritis is a small gram negative diplococcus, first observed by Connellan in 1914 while examining extracted teeth, and is known as the Connellan-King diplococcus. Dunham, Elser and others have reported several gram negative organisms found in the mouth and in other parts of the body, but this organism does not compare with them and has never been found outside the mouth and throat after three years of searching investigation. Cultures have been made from the ear, nose and accessory sinuses, but all have been negative for this organism. When found it has been in a tonsillar crypt, or in some sinus in the tonsillar fossae after the tonsil had been removed, or around the roots of teeth. It is non-pathogenic, but is a powerful toxin producer.

It is but a short time ago when every ailment of the human body that could possibly be ascribed to an infective origin was attributed to disease of the teeth or tonsils. This theory was obliged to pass through the usual stages of reaction, only to find the pendulum swing to the other extreme. We are now fortunately traveling the middle road, acknowledging many cases of arthritis to be due to focal infection through the teeth and tonsils, and also assenting that many are of unknown origin. From an examination of 329 unselected patients made in the Cook County Hospital, it was found that 76 per cent. of the arthritic group had alveolar abscess, while other diseases, including pneumonias, respiratory and gastro-intestinal, only 23 per cent., or less than one-third of the arthritic group. Abnormalities in the tonsils were present in 45 per cent. of the arthritic group. Billings, who has done a vast amount of research in this direction, says without modification, "Rheumatism and endocarditis are unquestionably the result of focal infection of the mouth and throat." In a case suffering from a chronic systemic infection, the faucial tonsil should always be under suspicion as the most frequent source of the trouble, and in cases where no other foci can be detected, one should not hesitate to consider the removal of the tonsil, even in the case where the history of the patient and the examination of the tonsil discloses no positive evidence of the tonsillar origin of the trouble. I wish heartily to endorse these statements. Cases have been operated by me after internists have eliminated all other possible causes for the systemic disturbance; and while the tonsils in some cases have not been inflamed, and in many cases were very small, were found when removed to have been foul-smelling beds of pus of cheesy consistency; and the best of all, the removal has given relief and cure to the various pains throughout the system. If one is uncertain it is no crime to remove the tonsils, as one more possible source of infection is removed. The tonsil is only one of the many portals through which infection may occur, but it is one of the easiest to close.

That albuminaria is frequently associated with tonsillar disease is un-

doubted. I have operated under local anesthesia on several cases within the last few months which showed albumin in the urine preceding operation, to have it gradually disappear after the removal of the tonsils. Of course you are all acquainted with the work of Flexner at the Rockefeller Institute with the meningococcus, and all the weight of evidence shows that the organisms gain entrance into the circulation through the tonsil and naso-pharynx. The most ardent advocates do not claim that all cases of rheumatism, of nephritis or poliomyelitis have their origin at this point, but claim to have shown that a great number do come from this source. The writer is of this goodly company and so leaves his case before you.

The one subject which has always been of very great interest to me, and which I trust to be able to make so to you, is hoarseness. The hoarse voice is always pathognomonic of either intra-laryngeal disease or an intra-laryngeal expression of some disorder of the central nervous system. It may be symptomatic of intra-laryngeal tumors, both malignant and benign, and the character of the hoarseness will often suggest to the practiced ear the nature of the lesion. In children the most common cause of chronic hoarseness, for it is with chronic hoarseness that I shall deal only, is papilloma of the larynx, and in these young subjects they are almost invariably multiple. Some of these cases are associated with dyspnea, frequenty very alarming. The writer saw a boy of 6 recently who had been hoarse for two or three years, and whose larynx was almost completely filled with papillomata. There was extreme dyspnea, as the youngster had a chink only about one-sixteenth of an inch through which to breathe. The tendency to recurrence in children after removal is great, but it is found that treatment with radium and fulguration often entirely prevents recurrence. Papilloma in the adult are usually single, are of quite frequent occurrence, simple of diagnosis and removal. The prognosis for the restoration of the voice is excellent. I would like to say that with the newer methods of direct approach to the larynx, by means of the Jackson laryngoscope, or the suspension laryngoscope of Lynch, manipulation within the larynx becomes almost as simple as upon the face.

A common cause of hoarseness in young women is hysterical aphonia, in which no local laryngeal conditions are found to explain the loss of voice. I shall do no more than mention the loss of voice associated with tubercular, malingant or syphilitic disease. Any chronic hoarseness should certainly bring to your minds the possibility of these conditions. Of course any growth causing pressure upon the larynx may produce aphonia and dyspnea, and among these I may mention enlarged thymus in children, goitre and retro-pharyngeal abscess. The one particular phase, however, which I wish to emphasize is paralysis, due to pressure on the recurrent laryngeal nerves. I do not intend to burden you with much anatomical detail, but for the sake of giving you a clearer understanding of the mechanism of paralysis due to mediastinal pressure, and to illustrate the difference in this mechanism on the right and the left sides, I wish to briefly outline the course of the nerves on each side. The left recurrent branch of the pneumogastric is given off at

the level of the transverse arch of the aorta, and passes under it, thence upward in a groove between the trachea and esophagus to the muscles of the larynx. As it reaches the larynx it breaks up into several twigs, thus supplying motor stimulus to all the intrinsic muscles of the left half of the larynx except the crico-thyroid, which is supplied by the superior laryngeal. For this reason you will understand that the left recurrent nerve is the one most often affected, on account of its relationship to the arch of the aorta and the left subclavian artery. Aneurysm of the transverse portion of the arch of the aorta causes compression of the left nerve, thus inhibits motor impulses to the left side of the larynx, and unilateral paralysis results. The right recurrent is not so often involved, but its situation with reference to the subclavian artery and the apex of the right lung renders it liable to pressure from aneurysm of the right subclavian, pleural adhesions, enlarged glands along the course of the nerve, malignant tumors of the esophagus or gummata. The one point I wish to bring out is that a great many cases of aneurysm or of mediastinal growth are first evidenced by laryngeal paralysis. I have personally examined many, many cases where the sole symptom was loss of voice, and which upon examination of the chest and X-ray, etc., revealed the true conditions causing the pressure on the nerve. One case in particular I shall mention, as to me it is one of the most vivid illustrations of the necessity of following up the possible causes of any case of chronic hoarseness.

I saw a man in private practice who was a motorman who had been hoarse for several months and was treating himself for a cold. Examination of the larynx showed complete left-sided paralysis. Examination by an internist showed aneurism, which of course was expected. Gentlemen, when you stop to consider this man's occupation, and the danger in allowing a man with an aneurism to run a street car, I know you will appreciate my charge in this matter. Never neglect a case of chronic hoarseness, for it is often the earliest, and not infrequently the only evident symptom of very grave systemic disease. Even in tuberculosis, many times the process in the chest may be latent while active in the larynx, and again the hoarseness may be the first guide to the true condition. I had a case of this kind until a few days ago, when I sent him to the mountains. He is a young man of 21; had been hoarse about three months. Well built, considerably beyond average weight, sturdy and very athletic. Examination of the larynx showed marked infiltration of both false cords and of the left arytenoid. Tuberculosis was suspected, but a positive diagnosis could not be made from the appearance alone. Chest was examined by a very competent internist, who found no signs of tuberculosis. X-ray picture was taken of the chest, which revealed infiltration in the left upper lobe. Section taken from the larynx showed tuberculosis. Patient had no cough, no night sweats, no loss of weight, and physically gave the impression of being a very stocky young man. The condition of the larynx was the first guide in the diagnosis.

Just a few words before closing on dysphagia. The condition is often associated with hoarseness, and not infrequently produced by the same

causes. Difficulty in swallowing may be due to pressure upon the esophagus by growths in the mediastinum, such as gumma or carcinoma, or by an aneurism, or it may be due to growth or stricture within the lumen of the esophagus. The ease with which the lumen of the tube may now be examined, together with roentgen diagnosis, makes it unpardonable to neglect a complete search for the cause of dysphagia.

As to the neuroses of the larynx, I shall not burden you with many words. I have mentioned hysterical aphonia and the paralyses due to pressure. Of course central and bulbar lesions, tumors, traumatisms and other lesions at the base of the skull give rise to laryngeal paralysis by implicating the trunks of the vagi. Of course there is a great deal to be said about the influence of lesions of the central and sympathetic nervous systems upon conditions in the palate, posterior pharyngeal wall and the larynx, but I know some other gentlemen are to tell you about this, and, thanking you for your very kind indulgence and your interest, I shall now close.

AN UNUSUAL INJURY.

John R. Buckingham, M.D., Los Angeles, Calif.

One April 16, 1916, I was asked to see an accident victim, a man of eighty-six years of age who had had his fingers tangled between the horn of a saddle and a rope. On examination I found the middle phalanxes of the index, middle and ring fingers entirely devoid of flesh—nothing remaining but periosteum. The distal phalanxes of these fingers including the flexor profundis digitorum muscle had been torn off. The tendon and belly came out attached to the index and middle finger phalanxes. The muscle measured fifteen inches in length. This is the only case of its kind I ever saw or heard of. Someone is liable to say, when reading this, that I ought to be introduced to the fellow who gets twenty-nine miles to the gallon of gasoline. Anyway, I retain the specimen and will show it to any one who cares to see it.

The treatment of the case is also more or less interesting. The patient would not consent to have the ends clipped off or disarticulated, neither did he want them tucked under the skin. This tucking or plastic operation is good in finger conservation. The old fellow said his skin had great healing power, and it did as you shall see. Within a few days granulation tissue appeared, and on top of these raw edges I applied scarlet red ointment daily. He had a great deal of pain in these fingers and arm, but he was being treated after his choice, so he was satisfied. His last dressing was removed on May 25, 1916. From this time on for a couple of months he wore a glove but he gradually got good use of the hand.

Conclusion.—This little accident, of course, does not compare in any way with the seriousness of our every day casualties, but the odd nature of it makes it worthy of report. The end results, again, show what nature will do with a little human aid and coaxing.

A DIRECT MESSAGE TO YOU ON PRESSING PROFESSIONAL PROBLEMS.

Editor The Ohio State Medical Journal:

For nearly six years, through the columns of The Journal and in almost innumerable talks before the various county medical societies, I preached to the physicians of Ohio the need of medical organization.

I always had in the back of my head a rather persistent suspicion that some of them felt I was working to feather a nice comfortable little nest for myself. I know that some physicians discounted what I said, because—as executive secretary of the State Association—I was paid to develop the medical organization idea.

I preface my note with this statement to better emphasize the point which prompts me to write this letter to The Journal. Now that I am well removed from the Association's pay-roll, and can be accused of no motive other than real friendship for a group of men with whom I was pleasantly associated, I sincerely hope that my advocacy will have more weight than it seemed to have at times in the past.

When I read in The Journal the other evening that the Cleveland Academy of Medicine had under serious consideration a plan for real, intensive, practical organization, I was very much pleased.

As I read further into the detail of plans, I saw that the three members of that Cleveland committee had a real vision as to the needs of the situation.

I am writing this in the hope that it may in a small way contribute to the development of an appreciation in the minds of members of the profession in Cleveland of the importance of this plan, and of its practical value to them.

For nearly a year I have been completely out of touch with medical organization, but I believe that this detachment has made me better able to judge the actual value of these things. In those months I have come into close touch with business in general, and have gained a better idea of the decided trend in all lines toward organized and co-operative effort.

The Cleveland plan is nearly ideal, in my opinion. Its operation will be a splendid thing for the State Association as well as for the physicians in that city, because the plan quickly will demonstrate its value and will spread to the other large cities of the state. Not until then—until in Cleveland, Toledo, Cincinnati, Columbus, Dayton, Akron and possibly some of the smaller cities develop local organizations with full-time executives in charge—will the medical profession of Ohio be properly organized.

If the Cleveland Academy will lead the way, its members will find the investment profitable. It will take large annual dues to maintain such an organization; but I maintain that they quickly will find it profitable. Dues of $50 per year per member are only relatively large. The trouble in the past has been that doctors have tried to finance their organization

on a shoe-string. It will not work in organized medicine any better than in other fields.

This matter of dues, which is vital, should be approached by the physician in a manner entirely different from that to which he is accustomed. He should view it in the light that the business man regards his trade or business association. The man in business frankly recognizes its value to his business, and its need to the continuance of his business, and pays accordingly. In almost every line of commerce the trade association is viewed as one of the factors in the cost of producing the article, and the cost of that association affiliation is charged up as a cost of production. For example, in my present work as publisher of a daily newspaper I find that active membership in the American Newspaper Publisher's Association is not merely a pleasant social connection, but a very necessary factor in my business. The association affords me protection against conditions in dealing with which, as an individual publisher, I would be helpless; it keeps me in touch with the work of other newspaper men and enables me to profit by their experience. I do not particularly care what that membership costs, so long as I know that the cost is equitably divided among all publishers and that the thing is fairly managed.

Until the physician comes to regard his association, state and national in a similiar light, he is sure to be a penny-pincher. And if the individual physicians will not adequately finance organized effort, you may well quit trying to be of pratical benefit to them.

In the years of my connection with the Ohio profession I found a steadily growing recognition of the need for organization of the intensive type. There were, and are, and always will be small-minded men in every community. These, unable to see beyond the end of their noses, will oppose plans such as proposed in Cleveland. But there are enough men of broad vision to smother these little pig-eyed fellows—and now is the time for the big fellows to swing into action.

For years while I was actively connected with the work I had a vision of what the State Association could be made, and the Cleveland plan is the first step toward that realization. First, of course, was the necessity of developing a state organization which could produce an influential journal, afford protection against black-mailing malpractice claimants, cope intelligently with situations which, like the development of the workmen's compensation scheme, were pregnant immediately with disastrous possibilities. These things, and many others the State Association now does. But back of any effective state-wide effort there must be adequate local organization.

In my connection, I found that the organizations in the small counties were far more effective than those in the large cities. In the small counties everyone was interested. They could, and would work effectively in accord with almost any state movement. But in the cities, a much smaller percentage of the profession was actively interested.

This was clearly shown in the legislative situations which developed. Quackery and humbugism found few supporters in the rural counties. Through the local organizations we were able always to secure at Columbus a respectful audience with the rural legislators. But when the legislative delegations would roll in from Cleveland, and Cincinnati, and Toledo—and particularly Toledo—and the other large cities, I would knock no wood and silently offer one of my infrequent prayers.

This was not because the large cities lacked men who were intensely interested, or who worked hard to co-operate in our effort to prevent the legislature from bequeathing the state to medical burglars. In every large city were some men who responded splendidly. But the job was a year-around job, a job that needed constant local attention and constant local education, from one year's end to the next. It was not a matter that could be handled as it is in the small counties, by a little concentrated work at the opportune time. It was, in other words, too big a job for a small group of busy physicians to handle.

The men managing the commercial interests who profit by breaking down every public health protection, recognize this. They work constantly. The result is that a handful of skalawags, in Cleveland for example, can almost without exception, exert more influence than the group of several hundred representative citizens who comprise the Academy of Medicine. They have gotten away with it for years.

The hopeful thing to me about the Cleveland plan is that they are getting started in time. If they wait another two years they will be locking the garage after the flivver is missing.

I say this because I feel that scientific medicine is facing a death struggle, and that unless the honest practice of medicine is protected by those who appreciate its possibilities for good, it will be so hampered and handicapped that its practice will be unattractive.

Personally, I think that compulsory state health insurance is a harmful thing for the state, and a ruinous thing for medicine. It will reduce medical practice to a plane where the incentive for brilliant service is removed, and where a premium will be laid on mediocrity.

I believe that if the physicians of this country will effect a first class organization they can develop education which will make this fact evident to the country—off-set the undoubtedly effective propaganda of the long-haired and pinch-headed social reformers. Unless such organization is effected, speedily, this half-baked crew will foist this prussianized scheme on us. The New York state legislature's antics certainly made that point clear.

I became fairly familiar with medical organization work in the various states, and in my opinion Ohio has by far the best chance to develop the kind of an organization that can nip this and similar schemes. For that reason, I was delighted to see Cleveland swinging into line with a most effective contribution to that end.

I regret, at times, that doctors are so destitute of business sense.

When it comes to looking after their own interests, they appear to be perfectly at home in swaddling clothes. As a layman, with some appreciation of the need (in behalf of the country at large) of developing a medical profession on a high plane, I hope that they will now rally to the protection of those interests. My belief, however, is based solely on the fact the thing has become so serious that, from this time forward, the best interests of the public are co-incidental with the best interests or the profession. And in six years I have never known them to fail to rally to the support of any movement in the interests of public protection.

In other words, protecting what might be termed the selfish interests of the medical profession has become identical with protecting the best interests of the great public. I have faith that physicians everywhere will respond to that appeal.

Now is the time. Hit hard. Scientific medicine proved its worth in the world war. We didn't hear much from the quacks in 1917, when Hell was loose. There wasn't any howling demand for chiropractors in Flanders, and Mary Baker Eddy's healers-for-profit-only were wise enough to remain almost conspicuously silent in those brass-tack days. But the pack is loose again, yelping louder than ever. Furthermore, the war produced drastically changed industrial conditions which have an important bearing on medical practice conditions—the war made possible industrial advances which would have required many years to develop otherwise. To hold the advantage gained through results proved to the world during the war, and to secure for humanity adequate medical service under the changed conditions, organized fighting is necessary.

But please remember that to fight effectively you must be organized. That Cleveland plan is the best two-fisted argument I ever have had the pleasure to inspect.

GEORGE V. SHERIDAN,
Ex-Secretary Ohio State Medical Association.

Does Prohibition Pay From a Health Standpoint?

With the beginning of prohibition, alarmists—there are always such—predicted dire calamities: increase in crime, resort to habit-forming drugs and other vicious practices. The time has been brief for the compilation of accurate statistics on the subject, but some actual evidence has accumulated: In New York City, the Board of Ambulance Service has reported a large decrease in cases of alcoholism and intoxication. In 1919, during January and February, there were 412 and 364 alcoholic calls, respectively. This year, during the same months, these calls numbered 307 and 133. Bellevue Hospital's figures show 228 calls for intoxication during the first two months of 1919 and thirty-one calls for January and February of 1920. As a result, it is estimated that there will be room for seven thousand new patients a year in Bellevue Hospital, owing to the reduction in the number of alcoholic patients. These figures are for New York. What of other cities?—A. M. A. Jour.

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WILLIAM NELSON MUNDY, M.D. . . . . EDITOR.
FOREST, HARDIN COUNTY, OHIO.

J. K. SCUDDER, M.D. . . . . BUSINESS MANAGER.
CINCINNATI, OHIO.

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THE SMALL DOSE.

No observer has failed to note, at times, the remarkable effect produced by an unusually small or trivial influence. Notable examples illustrative of this are not wanting.

Gross dosage, in medicine, is so often a failure or has such deplorable effect that we read with relief of the splendid results obtained by Dr. Francis E. Park, Stoneham, Mass. (New York Medical Record, Jan. 10, 1920), in the treatment of pneumonia and influenza by small doses of sodium salicylate, iron phosphate and beechwood creosote, given intravenously in normal salt solution.

The compound is made according to the following formula:

"Dissolve in 60 c.c. of physiological salt solution, 1.3 grammes each of sodium salicylate and soluble iron phosphate. Filter this and sterilize with heat. Then add 1 c.c. of a saturated solution of the best beechwood creosote in lime water. The solution is then ready for use. The dose varies from 3 to 5 c.c. and can be repeated in twelve hours if needed. I have never given more than four injections in any one case, and the great majority required but one.

"Great care must be taken to put the injection into the vein. If it is deposited in the arm, much pain and disability will result. There should be absolutely none if it is given right. If the needle is inserted properly it will be possible at any time to prove its position, by withdrawing the piston of the syringe slightly, when the blood can be seen pouring into the barrel. One should always use an all-glass syringe and insist on having one with the nipple on the side, rather than on the middle of the end of the barrel, as is usual. The advantage of this is twofold: First, it is much easier to insert; and, secondly, it gives one a larger margin of safety, in case a bubble of air has gotten in through a poorly fitting needle, and one does not wish to remove it at the time; for until all the solution has been injected the air will stay in the top of the barrel and one can easily control it.

"The injection should be given very slowly and through a 26-gauge needle; a steel needle can be used perfectly well, and has the added advantage of a sharper point.

"The only reaction that will be observed comes at once. First there is a flushing of the face, quickly followed by nausea, and in some cases emesis. It is all over as quickly as it comes and nothing further is felt. It is well to explain this to the patient, so as to prevent any alarm on his part.

"In conclusion I wish to emphasize that the great point of this treatment is that it must be used promptly—as soon after the onset of the disease as possible. The patient rapidly loses the power to react. I should not hesitate, however, to use it at any stage, for in the many thousand injections I have given, even in very aged and weak people, I have never seen any harm occur. But it is pre-eminently a treatment to abort and cure the disease in the early stage. In six years' constant use I have never seen it fail when given at this time."

This is spoken of and recommended by the doctor as "a near specific" for influenza and pneumonia. His results as well as dosage are in marked contrast to those advertised by the followers of massive dosage.

What condition is met, what part of the remedy is essential or specific? B.

INFLUENZA

A recent letter from London (A. M. A. Journal) corroborates the oft-repeated statement that no serum or bacterin has yet been offered that justifies any assurance or promise of cure of influenza. In light of the fact that research has, as yet, established no etiological basis for the disease, little is to be expected from experimental or empiric formulae and their equally experimental or empiric use.

It would seem that in view of the existing uncertainty some reason might be offered for continuous trial of polyvalent or compound bacterins as a preventive measure, yet we are further informed that the bacteriological findings justify the belief that in localities, not widely separated, the same etiological factors, bacteria, are not found, or if so the predominance of any one germ is not characteristic of all.

If this proves to be true, then any one fixed formula for treatment, any serum or bacterin, any one medicine or medicinal formula would prove not only illogical, but inefficient as well.

If bacteriology, and any treatment based there on, teaches any thing to the medical world it is the lesson of specificity. If it proves of greatest possible value it must do so by necessitating first a specific or positive diagnosis, which to be of any practical value must presuppose an equally specific or positive medication.

In other words, why have a positive or specific diagnosis and then resort to the all too common use of a pet formula, serum or remedy?

The latter might be admissible, effective and of no harmful result if causes were always the same and said causes always positively known.

The administration of any drug can not, in the very nature of the conditions, meet with unvarying or uniform success, if the drug or remedy of whatever kind, is given with no other reason than that the patient has the influenza, or any other disease. If, as shown above, the etiology varies, the remedy must have modification to meet the existing difference. Again, granting that the etiology may be the same in two cases, we must not forget that the individuality of the two patients will vary and manifestations of the disease be correspondingly different. So called idiosyncrasy to certain drugs or substances is not so much due to the agent as to the condition of the patient, as has been well shown in those who become sensitized to certain substances. The determination of the etiology, therefore, does not, of necessity, in many cases at least, solve the entire problem nor point the way to positive medication? Other factors as above indicated must be considered. The tendency is to reach some easy as well as direct method of prescribing. A physician told me last year that after the influenza appeared he outlined a form of treatment which he subsequently followed. This treatment was made to fit all cases. Would it be successful?

This all shows a lamentable tendency to fall back to the old ideas of treatment, regardless of better ideas as to specific etiology, rather than to treat along advanced ideas in line of the progress in other directions.

If it is proven that any agency always produces well-defined, certain results, we should determine the certain and well-defined remedy, for by this means a long chain of symptoms will disappear when the specific remedy is applied. This is true of drug therapy. It was disclosed long before bacteriology reached its present development. It ought to be as true of facts founded on bacteriology, and doubtless will do so if bacteriology does not pass into the realm of forgetfulness, where it belongs if it is not founded on the truth?

Granting that it is true, and this is not a question at issue, should not the principles laid down and which governed the research work of former brilliant men be kept in mind, and to this specific case should not specific and not haphazard medication be applied? B.

ORGANIZATION.

Elsewhere in this issue we have inserted a letter written by J. V. Sheridan for the Ohio State Medical Journal. Mr. Sheridan was formerly business manager for the Ohio Medical Journal and writes from experience. It will bear careful perusal. The writer has been accused of being a "pencil pusher," and I presume there are many physicians who are heartily tired of receiving letters from him. Granting this to be true, they are no more tired of receiving than I am of writing. It seems strange to me that physicians can not see the conditions confronting them and the inevitable result that will follow state insurance and the constant tendency toward paternalistic and socialistic legislation. Could

they but see or realize the conditions they would organize for a purpose, and it would be unnecessary for the state and national officers to be constantly urging them to do their duty. For it is their duty, not a privilege or a luxury.

I have now been in the harness since 1883, and I am tired of my work, and especially so when I note the indifference and lack of interest on the part of the physicians. They seem to me to be blind to their own interests.

I can not be accused of selfishness or self-interest, because most of my labor has been gratuitous and the pittance occasionally received will not pay the extra expense incurred by the work to be performed. This is also true of all our state and national officers. They are working for the interest of those they represent and not their own.

It is no idle dream to say that the medical profession must organize for its own self-protection. Every profession and trade has done so, and it is time we must, or would-be social reformers and philanthropists will wipe us off the map. The constant and steady increase in the price of labor, the terrific propaganda now being carried on by teachers' organizations, not only in the magazines and daily papers, but in the halls of legislation, are but examples of the trend of organizations. Even the ministers, no doubt, the poorest paid of any profession, feel the necessity of the occasion and are being rewarded for their organized efforts by a slight rise in their yearly stipends. The conditions call for a second sober thought, and the best efforts we possess as men to check this restlessness and craze for large stipends and to bring conditions to a normal status. The present unrest is fraught with danger to orderly society and demands a steady and wise directing hand to avert actual catastrophe to organized society.

Right or wrong, I will not positively assert, but it appears to me I can discern the directing hand of socialism in much of our recent legislation. It is class legislation of the most dangerous type. We are apeing after the Old World and we may reap the same harvest. Teachers' pensions, mothers' pensions, blind pensions, soldiers' pensions, workmen's compensation laws, industrial and sick insurance, etc. We wonder where it will stop, and why one class should be selected for benefits and the other class made to bear the burdens.

Much of this legislation is inimical to the profession. The teacher and wage earner receive a minimum salary by state legislation, and the doctor is taxed yearly for the privilege of following his profession after preparing himself in accordance to state legislation. He pays a license to the national government for the privilege of prescribing narcotics and he is limited in the prescribing of alcoholics and bound with endless red tape in so doing. These conditions do not interfere with me to any great degree, but are cited to illustrate the tendency of recent legislation.

Doctors must organize, not only for their own protection but for the welfare of those following us. Dr. O'Reilly of New York recently de-

clared that refusal to tender his services to the Health Insurance Panel would inevitably lead to the state's refusal in turn to renew the license of the offending physician when he applied for re-registration. Dr. O'Reilly says he was informed by State Senator Loring Brown that any physician, dentist or druggist who refused to make the health insurance law operative when enacted, would have his license to practice his profession in the state taken away from him. "In other words," says the doctor, "we are to be destroyed unless our three professions supinely surrender our manhood and our right to the living to which we have consecrated our lives. While it may be true that our right to a license is alienable and that the state, out of pique, may take it away from us, the fact remains that our economic right is the same as that of any other citizen. Economically the right of the physician, dentist and druggist is no different from the longshoreman. If you cut down the wages of the longshoreman he has the right to protect himself. Our right is precisely the same."

It is time for the doctor to wake up. He has been too self-satisfied and indifferent. M.

THE NATIONAL.

The coming meeting of the National Eclectic Medical Association at Atlanta, Ga., June 15-18, marks the fiftieth anniversary of its organization. A half century ago a few of the stalwart Eclectics who had devoted years to hard study and thought in order to evolve and develop the basic principles of our school, and had withstood repeated persecutions by members of the dominant school in their efforts to destroy this new idea, banded themselves together for the purpose of bettering treir condition by the exchange of thought and experience, and also the better to protect themselves through organization from the attacks of the enemy. They were representative men from the different state societies who adhered firmly to their purpose, knowing the soundness of their doctrine, and labored on and on until their good works became so apparent that the public recognized their superior methods and backed them in their efforts by giving to them their patronage and influence.

They have passed from the field of action and have left to us, their descendants, a rich heritage of which we should be proud and which it behooves us to maintain and support. On this, the fiftieth anniversary, is a most splendid time for us to show our appreciation of what they have given to us by demonstrating our loyalty to the cause of Eclecticism. This can best be done by attending the meetings of our state societies and of the National Association, thereby supporting and helping to maintain these organizations which have made it possible for us to withstand the attacks of our enemies and continue to exist as a school and practice as Eclectics, giving to our patients and to the world the benefit of the superior teachings of our school. Begin now to make your arrangements to attend this meeting.

The outlook at present is bright for a splendid meeting. Many have signified their intentions to attend. We have many papers promised from some of the best men of our school, while many other bright lights will be there to lead in the discussions. Prof. J. U. Lloyd will give us some instructive talks, as he always does, and, in addition, Prof. Thomas Lloyd, son of Prof. Lloyd, will give an illustrated travel lecture.

Dr. N. A. Graves, of Chicago, who gave us such a wonderful clinical lecture last year on tuberculosis and its treatment, will be with us and give another clinical lecture on the same subject. Many who heard him last year said his lecture alone was worth the trip to Chicago. He will be still better this year. Don't fail to come and take this post-graduate course. Three or four days spent at this meeting will be worth as much to the busy doctor as a month in a college. If you have some difficult cases in which you feel the need of counsel, here will be the place to get the benefit of the best talent in the land. Bring along your patient if you wish.

Besides all this opportunity to get valuable information, there will be opportunity for much pleasure and sight-seeing. The delegation from the South which attended the meeting at Chicago last June invited us to hold the coming meeting in Atlanta and promised us that if we would come there they would give us, not just a sample, but a full sized serving of genuine world-famed hospitality. Their invitation was accepted. We know that what they purpose that they perform, and now let us show our appreciation of their invitation by accepting their proffered hospitality and go to Atlanta in full force for four days' stay at this meeting and fittingly celebrate the Golden Jubilee anniversary.

We have it from well authenticated sources that the good brethren of Atlanta and Georgia expect to give us a real old-fashioned Georgian barbecue with loads and loads of good things to eat, such as only the good folks of the South can prepare. Also an automobile ride into the country to some of the historic points, Stone Mountain, and through the city. It is an opportunity of a lifetime. You can't afford to miss it. So come on and let us show our loyalty to the cause of Electicism and our appreciation of the efforts of our good friends and brothers in the South, who have also arranged for a few surprise entertainments. Organize a company of traveling companions, take your wives and come for a good time. Kimball Htoel is headquarters. Rooms without bath $1.50 up, with bath $2.50 and up.

Write at once to Dr. Samuel Green, care Kimball Hotel, Atlanta, chairman of the Entertainment Committee, and reserve rooms for the meeting.

COFFIN.

AN OPEN LETTER.

STATE COLLEGE, Center Co., Pa., April 17, 1920.

My Dear Dr. Mundy:

In the March QUARTERLY, page 242, you say the National met at Atlanta, 1878. That is an error. It was in 1886. Dr. Piper, of Tyrone, Pa., was

president. There was quite a delegation from Pennsylvania went to that meeting. I had joined the National the year before, when it met at Altoona, Pa. Dr. C. M. Ewing, of Harrisburg, and myself, who were with the Pennsylvania delegation in 1886, will try and be with them in 1920. The meeting at Atlanta in 1886 was held in the Opera House, the headquarters at the Kimball Hotel, same place it is to be this time. The hotel was new at that time and Atlanta was proud of it because they said it was the most up-to-date hotel in all the South at that time. At that meeting Dr. L. E. Russell was elected president for the next year. Meeting was held at Waukesha, Wis. I also attended that meeting in 1887. At that meeting Dr. Durham, of Atlanta, was elected president. Do hope we can get as many to go to Atlanta from Pennsylvania this year as we had in 1886.

Yours as ever, W. S. Glenn.

AN APPRECIATION.

The Star-Republican, published at Blanchester, O., and edited by Lieutenant Governor Clarence J. Brown, in a recent issue carried an editorial on "The Country Doctor." It is of interest primarily in indicating the attitude toward the medical profession in the mind of a prominent state official. Throughout his official career, Lieutenant Governor Brown has shown a friendliness toward the profession and his acts have shown a clear conception of ethical medical standards and scientific medical service as distinguished from cultism.

His editorial is herewith reproduced:

"The country doctor is neither a philanthropist nor a pickpocket. Nor is he prince or pauper. He is not always the most skilled nor the most learned of his profession, but he has the most human heart. Neither is he always the most efficient, but he is the hardest worker of his class.

"To the many who first see the light of day in rural surroundings he is the Father Confessor. He is one to whom they turn in the moments that try men's souls. Their own burdens are lightened by placing a part of them upon the shoulderrs of the country doctor. In sickness and death he is always with them. Not as a physician of the body alone, but oft-times as the healer of hurts and pains far more deep. In health and prosperity he rejoices with them. A keen and kindly interest is always taken in their success. In their reverses he sympathizes with them.

"The ranks of the country doctor are growing thin. Higher remuneration and easier hours have caused many of the young men entering the field to turn their eyes from the duties of the country to the more alluring work in the cities. The scarcity of practitioners in the country districts is growing alarming. Something should and must be done. For the young man entering into life no greater opportunity for serving mankind could be found. It is our hope that many will see the light and take advantage thereof." —*Ohio State Medical Journal.*

Dry Law Gives Young Doctors Ample Incomes.

"CHICAGO, April 16.—The day of the struggling young physician who worked for years on a scanty income while he built up a paying practice, is past, providing national prohibition continues in force, according to Captain Hubert Howard, prohibition enforcement officer for Illinois.

Instead of sacrificing the best years of his life to the struggle to make both ends meet, the young medical school graduate will now step into an assured income ranging anywhere from $100 to $500 a month. This is the roseate picture painted by Captain Howard.

The present prohibition regulations limit physicians to 100 government prescriptions for liquor per month. Chicago doctors are charging all the way from $1 to $5 for the blanks."

If there was cause for indignation and protest upon the part of the medical profession, the above clipping from a daily paper furnishes the incentive.

Personally I do not believe there is any reason or just cause for this allegation or reflection upon the profession. I do not know of a single physician who has taken a permit to prescribe liquor and moreover there is no profession whose ethical standing is higher than the medical. Moreover, there are, comparatively speaking, but few drug stores that are prepared to fill prescriptions of this description. The few physicians that will write these prescriptions or prescribe narcotics in defiance of the Harrison Act are not to be taken as representing the profession, or the moral attitude of the profession, no more than one or two revenue officers who accept bribes are to be taken as representative of the entire force. As physicians are allowed to prescribe but six quarts a year, how can one earn $500 per month?

M.

Extensive Military Service.

Dr. William H. Henry, of Hamden, Vinton County, has a military record distinguished by variety and length of service. Serving as commanding officer of the American Hospital at Archangel, Russia, from August, 1918, to July, 1919, Dr. Henry had the unique honor of being the only Ohio physician to serve with the American forces in northern Russia. Following this he returned to the States for duty at the General Hospital at Fort Sheridan, Ill., the largest general hospital in the country, remaining until December 26, when he started, via San Francisco, for Vladivostok, Siberia, where he is now serving with American forces.

The above, clipped from the *Ohio State Journal,* is an erroneous statement, as Dr. Henry was not the only Ohio physician to serve with the American forces in northern Russia. Dr. Ralph Powers, of Amherst, had command of the ambulance service in northern Russia and was killed in action at Ust Padenga, Russia, January 23, 1919. He was awarded the D. S. C. for heroism under fire and promoted to a captaincy. M.

NEWS AND NOTES.

Arizona.

Dr. J. Byron Van Horn has removed from New Mexico to Mayer, Ariz.

California.

Dr. E. E. Zolman, formerly of Ohio City, O., has located at 317 L. B. Bank Bldg., Long Beach.

Dr. E. T. Behymer, formerly of Owensville, O., is located at 1729 East 22d Street, Los Angeles.

Dr. John M. Cleaver has changed ris address from Bradbury Bldg. to 317 Exchange Bldg., Third and Hill Streets, Los Angeles.

By a law of California, an annual tax of $2, due January 1, 1920, is payable by every individual who holds any form of certificate which entitles him to practice any system of healing art in the state. If the payment is not made within a period of sixty days, delinquency becomes operative and a fee of $10 is required to reinstate the certificate of such delinquent.

Connecticut.

Dr. George A. Faber has moved from Waterburg to 82 Edgehill Avenue, Waterville.

Michigan.

Dr. Nelson McLaughlin, one of the members of the Michigan State Board of Registration of Medicine, has removed from Lake Odessa to 1524 Hamilton Boulevard, Detroit.

Dr. A. L. Robinson, of Allegan, has been reappointed as a member of the Board for four years.

The staff of the University Hospital, Ann Arbor, Mich., announces a series of medical, surgical and special clinics to be given on the afternoon and evening of the second Wednesday of every month and the morning of the following day. These clinics are intended to help practitioners to keep abreast of new and interesting developments. Difficult cases will be demonstrated and discussed. An added feature will be a clinicopathological conconference on cases coming to necropsy. The plan has been arranged to enable practitioners to see the maximum amount of clinical material with the least expenditure of time, and to carry out the policy of the hospital to put its teaching facilities at the service of the profession. Conferences will be held in the surgical amphitheater of the University Hospital unless otherwise stated. The schedule has been arranged with the view of allowing practitioners to make the best train connections in reaching and leaving Ann Arbor. The exercises will start at 1:30 p. m., 7:30 p. m. and 8:30 a. m.

New York.

Dr. Theodore D. Adlerman has been appointed neurologist on the staff of Cumberland Street Hospital, Brooklyn.

Dr. W. L. Heeve is the attending surgeon at the same hospital.

The sixtieth annual meeting of the Eclectic Medical Society of the State of New York was held at Albany, N. Y., April 21 and 22, 1920, with the

average attendance. The secretary proposed nine new members. The following officers were elected: President, Dr. L. B. Dawley, of Westtown, N. Y.; First-Vice President, L. B. Gardner, of Geneva; Second Vice-President, A. B. Wolf, of Queens; Third Vice-President, E. G. Padgham, of Geneva; Secretary and State Organizer, T. D. Adlerman, of Brooklyn; Treasurer, H. Stoesser, of Union Course. The Legislative Committee, through Dr. W. L. Heeve and Dr. T. D. Adlerman, reported that a successful campaign was conducted against the Compulsory Insurance Bill, against the Medical Practice Act and against the Chiropractor Bill and Health Centers Bill. Place of next meeting, Albany, N. Y., April, 1921.

The Society voted one hundred dollars to the Eclectic Medical College of Cincinnati.

The annual meeting of the Eclectic Medical Socity of Greater New York (comprising the Eclectic Medical Society of the County of New York and the Kings County Eclectic Medical Society) was held at the Rendez Vous, West 43d Street, New York City, Monday evening, December 15, 1919.

There was an exceptionally good attendance in spite of the busy season of the doctors.

After a few encouraging remarks made by the president, Dr. G. J. Olsson, the secretary, Dr. M. B. Pearlstein, reported that during the year just closed the society held six meetings, alternately in New York and Brooklyn, with the following essays at each meeting. At the January meeting, held in Brooklyn, Dr. M. B. Pearlstein presented an essay pertaining to "Medicine, Surgery and Obstetrics." At the March meeting, held in New York City, Dr. Milton I Wasch, of Brooklyn, gave an elaborate exhibition and practical demonstration of X-ray examinations and diagnosis of interest to the general practitioner. At the May meeting, held in Brooklyn, Dr. Joseph Coleman, of New York City, read an essay on "Diseases of the Upper Respiratory Tract. At the September meeting, held in New York City, Dr. Joseph Lebenstein, of New York, read an essay on "The Importance of Urethroscope and Cystoscope in Urological Practice." At the November meeting, held in Brooklyn, Dr. Milton I. Sthrahl read an essay on "The Treatment of Bone Injuries in the A. E. F."

The secretary further reported that during the year we have lost two members by death, Dr. A. J. Givens, of Stamford, Conn., and Dr. J. E. Haggerty, of New York City. He also reported that Drs. Theodore D. Adlerman, of Brooklyn, and Carlton Simon, of New York, have resigned from our society and that seven new members have been added to our society during the same period.

The treasurer, Dr. J. Birkenhauer, then reported, showing the society in good financial standing.

After the meeting an elaborate supper was served and all the members and guests present voted the whole affair a grand success.

Obituary.

It is with the most profound regret that we announce the death of our

beloved member and friend, Dr. Geo. W. Thompson, who entered into rest April 3, 1920.

Dr. Thompson, the son of Dr. George Thompson of Cleveland, O., was born February 22, 1855. He studied medicine with his father and matriculated in the Eclectic Medical College of the City of New York in September, 1883, and graduated from the same college in 1885. He located in New York City and was successful from the very start. He built up a large practice and became well known for his medical achievements. Soon after he was chosen as demonstrator in anatomy in the Eclectic Medical College of the City of New York, and at the session of 1887-1888 he was appointed Professor of Physiology, which chair he filled with much credit and satisfaction until the session of 1891-1892, when he was appointed Professor on Practice of Medicine, which chair he held until the close of college in 1912.

Dr. Thompson was, for a number of years, president of the faculty and vice-president of the board of trustees of the Eclectic Medical College of the City of New York. He filled numerous positions in the County and State Medical Societies and was president of the National Eclectic Medical Association for 1909-1910.

May his soul rest in peace. M. B. P.

Ohio.

Dr. Franklin D. Postle is located at Sedaila.

Dr. Cyril O. Dozer has located at Roseville.

Dr. Claude W. Davis has removed from East Liberty to West Mansfield.

Dr. Reeves W. DeCrow has been appointed health commissioner for Scioto County.

Dr. James J. Martin, of Bucyrus, has been appointed health commissioner for Scioto County.

Dr. Wm. B. Quinn has been elected secretary of the staff of the Springfield City Hospital.

Dr. J. J. Sutter has been appointed health commissioner for Allen County and hence will devote his entire time to that work.

Dr. P. H. O'Hara, formerly of Lewisburg, who has been in California, has returned to Ohio and is located at 331 Kenilworth Avenue, Dayton.

L. M. Ross has moved from Cambridge to 165½ N. High Street, Columbus, where he will devote his time to rectal and chronic diseases.

Dr. P. E. Decatur has removed from Washington C. H. to Jefferson Theatre Bldg., Hamilton, O., and opened a new office. He will confine his practice to the eye, ear, nose and throat.

Dr. G. T. Wasson has been appointed health commissioner for Ashtabula County, Dr. N. Sifritt health commissioner for Marion County, Dr. M. F. Minshull for Perry County, Dr. G. W. Homsher for Preble County and Dr. W. H. Carey for Logan County.

All the students of Prof. J. U. Lloyd will rejoice at the signal honor which has come to our beloved teacher, a man well beyond the Osler period

of usefulness. The significance of the honor bestowed can be realized only when one thinks of the number of pharmacists working in the same field.

New York Branch of the
American Pharmaceutical Association.

New York, March 9, 1920.

Prof. John Uri Lloyd,
Court and Plum Streets,
Cincinnati, Ohio.

My dear Prof. Lloyd:

It gives me great pleasure to announce to you that you have been elected recipient of the Second Remington Honor Medal, and I hereby wish to extend to you my heartiest congratulations.

According to the rules, the medal should be awarded at an April meeting of the New York Local Branch in New York City. I sincerely hope that it will be possible for you to come to New York to be presented with the medal. I have already started plans to arrange for a banquet at which the actual presentation will be made. It now remains for you to decide which evening in April you can be with us. Whatever is most convenient to you will suit us, but on or about Monday, April 19th, we think would be about right.

Kindly let me know at once if possible whether you can come to New York, and also on what date, as it will enable me to perfect the arrangements to have these details settled.

Again asking you to accept my heartiest congratulations, I am

Very cordially yours,

(Signed) Hugo H. Schaefer, *Secretary.*

* * *

Plan for the Joseph P. Remington Honor Medal.

That a gold medal, to be known as the Joseph P. Remington medal and suitably engraved, be awarded to the man or woman who has done most for American pharmacy during the preceding year or whose efforts during a number of years have culminated to a point during the preceding year where the result of these efforts would be considered as being the most important and advantageous for American pharmacy. That no bar be placed as to the candidate's profession or kind of work accomplished.

That the Special Committee on the Pharmacy Honor Medal be empowered, in order to make the presentation of this award permanent and perpetual, to raise a fund of $1,000 and, in addition, sufficient money to pay the initial expenses of die, postage, etc. That this money be raised by obtaining a contribution of $100 from the Branch treasury and the rest to be made up by voluntary contributions from the members and firms in New York City and vicinity. That the $1,000 fund be invested in Liberty Bonds, which bonds are to be held in trust by the treasurer of the American Pharmaceutical Association.

That the medal be awarded by a standing committee consisting of all the past presidents of the American Pharmaceutical Association, and in case the number of living past presidents is less than five, the senior past vice-presidents of the American Pharmaceutical Association are to be drawn upon in sufficient number to create a committee of five. The secretary of the New York Branch is to act as secretary of this standing committee.

That the medal be presented by the Senior Past President of the local branch or, in his inability to do so, by other past-presidents in the order of their seniority.

The regular quarterly meeting of the Ohio State Medical Board was held in Columbus, April 5 and 6, 1920, all members present.

The semi-annual examination for physicians, Osteopaths and non-drugless healers was set for June 11, 12, 13 and 14.

Reciprocity certificates were granted to the following applicants on the basis of previous State Board examination and registration:

W. C. Arthur, Univ. Md. '97, Penn. '97; to Akron.
H. J. Baker, Univ. Louisville '10, Va. '10; to Hamilton.
Lottie C. I. Blake (Col.), Amer. Miss. College, Battle Creek '02, Ala. '06; to Columbus.
J. E. Burgman, Ind. Univ. '18, Ind. '18; to Jackson.
C. M. Clark, M. C. of Va. '13, Va. '14; to Akron.
O. R. Clovis, Jefferson '17, Penn. '18; to Columbus.
A. G. Cranch, N. Y. Hom. '06, Penn. '06; to Lakewood.
R. Deming, Hahnemann, Phil. 1900, Penn. '02; to Youngstown.
J. A. DeRamus (Col.), Meharry '11, Ala. '12; to Cleveland.
R. H. Eisaman, Northwestern '18, Ill. '18; to Akron.
W. F. Gessler, Univ. Louisville '17, Ind. '17; to Niles.
H. A. Giltner, Ky. S. of M. '98, W. Va. '17; to Akron.
H. F. Harris (Col.), Meharry '05, Ala. '05; to Jefferson County.
J. C. Hassall, Albany '10, N. Y. '10; to Cuyahoga Falls.
W. H. Holland, Univ. Texas '12, Texas '12; to Lakewood.
C. F Hopson (Col.), Meharry '18, Ky. '18; to Franklin County.
R. C. King, St. Louis Univ. '18, Mo. '18; to Toledo.
A. J. Lanza, Geo. Washington Univ. '06, D. C. '06; to Cleveland.
C. P. McCord, Univ. Mich. '12, Mich. '12; to Cincinnati.
E. C. McCulloch, Ohio-Miami '10, Col. '10; to Mansfield.
F. J. Osborne, St. Louis Univ. '17, Mo. '17; to Cleveland.
Jesse L. Paine, Eclectic M. C. '16, Neb. '16; to Franklin County.
W. A. Samuel, Bennett M. C. '06, Ill. '06; to Zanesville.
J. P. Spooner, Rush '05, Ind. '07; to Toledo.
J. A. Watkins, Tulane '10, La. '10; to Cincinnati.
C. L. Williams, Univ. Pittsburgh '97, Penn. '97; to Youngstown.
A. M. Zinkham, Georgetown Univ. '12, D. C. '13; to Warren.

On previous diploma registration:

A. S. Adams, Minn. '85, Wooster Univ. M. C. '76; to Lakewood.

F. W. Brodrick, Univ. Ill. P. & S. '97, Ill. '97; to Cleveland.
H. W. Cruik-Shank, Harvard '95, Maine '95; to Troy.

The following were licensed to practice Chiropody under the five-waiver clause:

Elvin R. Frost, Toledo.
Mary Elizabeth Hover, Cleveland.
Mrs. Lottie Roark, Tiffin.

Same, massage:
William A. Campbell, Bellefontaine.

Hydrotherapy:
Frank Tancek, Cleveland.

Hydrotherapy and massage:
Charles H. Neff, Zanesville.
Emma J. Sweet, Bowling Green.

The Board adopted a new definition for Chiropractic, and made rules governing the examination of these limited practitioners, who are graduates of acceptable colleges, for the next June examination.

The certificate of Peter James Disser, a Chiropractor of Cleveland, was revoked for illegal advertising.

Alumni Statistics.

In perfecting the card index system of the graduates of the Eclectic Medical Institute and the Eclectic Medical College, which is kept both alphabetically and by states, a number of interesting facts have been noticed. Since the College started in 1833 as the Worthington Medical College, seventy-five years ago, there have been 14,319 matriculates (counting yearly duplicates) and 4,202 physicians were graduated. In this length of time the Great Physician has gathered 2,569 into his fold, and there are still 1,633 in active practice in the United States and foreign countries. In spite of the hardships, physicians live beyond the average years of life, according to mortality statistics. The numbers are divided into states, as follows:

Alabama	1	Louisiana	6	Ohio	453
Arizona	1	Maine	2	Oklahoma	31
Arkansas	25	Maryland	2	Oregon	12
California	59	Massachusetts	14	Pennsylvania	90
Canada	3	Michigan	46	Rhode Island	2
Colorado	7	Minnesota	7	South Carolina	2
Connecticut	9	Mississippi	7	South Dakota	3
Delaware	1	Missouri	62	Tennessee	27
Florida	16	Montana	6	Texas	48
Foreign	2	Nebraska	35	Utah	4
Georgia	13	Nevada	2	Vermont	1
Idaho	10	New Hampshire	5	Virginia	2
Illinois	126	New Jersey	9	Washington	14
Indiana	174	New Mexico	5	West Virginia	60
Iowa	30	New York	66	Wisconsin	7
Kansas	54	North Carolina	2	Wyoming	5
Kentucky	63	North Dakota	2		

Total 1,633

Oklahoma.

Dr. A. H. Collins has removed from Tarley to 2530 East Fifth Street, Tulsa.

Pennsylvania.

Dr. C. L. Johnstonbaugh has been reappointed a member of the Bureau of Medical Education and Licensure and has moved his office to 316 W. Broad Street, Bethlehem.

Dr. W. S. Glenn, Jr., and his brother have opened a private hospital of ten beds at State College.

Dr. J. T. Lafferty is employed in the relief department of the Pennsylvania Railroad at 8 Petroleum Street, Oil City.

Under a ruling made by Deputy Attorney General Swope, January 9th, the Pennsylvania Board of Medical Education and Licensure has no authority to revoke the license of a medical practitioner who has been convicted of an offense while in practice, sentenced to the penitentiary and released on bail pending an appeal. It has no power to revoke either in the case of one convicted of repeated offenses or of one who has escaped conviction through legal technicalities until the appellate court has passed on the appeal.

Federal Attorney E. Lowry Humes, at Pittsburgh, Pa., according to a dispatch to the Philadelphia North American, has received word from Dr. J. M. Baldy, president of the bureau of medical education and licensure, that the bureau has revoked the license to practice medicine in this state of Dr. Ellsworth J. Trader, of Pittsburgh, now serving a sentence in the federal prison in Atlanta, Ga., for illegal writing of prescriptions for outlawed narcotics. This action of the bureau is regarded as significant because of the recent assurance given Mr. Humes by President Baldy that physicians convicted of writing illegal prescriptions for whisky would be dealt with in the same way. Six Pittsburgh physicians have been arrested by federal agents during the preceding weeks.

West Virginia.

Dr. E. L. Woodford has moved from Belington to Horton.

Dr. R. W. Musick has moved from Verna to Matewan.

Wisconsin.

The Wisconsin Society will meet at St. Charles Hotel, Milwaukee, June 3, 4 and 5.

Dr. R. C. Rodecker has been appointed upon the medical staff of the Governor with the rank of major. As a result he resigned his position upon the board of medical examiners, and his brother, C. W. Rodecker, of Holcombe, was appointed as his successor.

The Wisconsin State Eclectic Medical Society holds its forty-fourth annual convention at Hotel Pfister, Milwaukee, June 3, 4 and 5. A fine program has been arranged.

MISCELLANEOUS.

Accuracy of the Wassermann Test.

Under the auspices of the Medical Research Committee, established under the British National Health Insurance Act, numerous investigations have been made of scientific problems affecting the health and the life of the people. Already more than fifty special reports have been issued. The committee considered that the national and racial importance, no less than the scientific interest of the problems relating to syphilis, were a matter for early investigation, and several reports have been issued in this connection. In a previous report of the Special Committee on Pathologic Methods, the diagnostic value of the Wassermann test was considered. The clinical opinion of a well-known syphilologist was compared in a given set of cases with the results obtained by the Wassermann reaction as performed by four expert serologists working independently. The results were found to be in the closest accordance with the clinical opinion.

In a recent report the investigation has been carried further: the Wassermann test during life was correlated with the etiologic or anatomic diagnosis made during life and after death. The first part, by Dr. Hubert M. Turnbull of the Pathologic Institute of the London Hospital, concerns the accuracy of Wassermann tests applied before death as related to the findings on postmortem examinations. It is stated in the introduction that whereas this test has been applied in millions of instances, "it is difficult, if not impossible, to find in medical literature a large series of cases in which the etiologic and anatomic diagnosis has been registered in addition to the clinical diagnosis." Dr. Turnbull's report deals with 121 cases in which Wassermann tests had been performed during life by Drs. Files and McIntosh. Following the deaths of the patients, minute examination of necropsy material was made. In many instances such minute examination is not made, with the result that lesions are overlooked. It is possible, for instance, that a Wassermann reaction may be positive and no syphilitic lesion may be found postmortem. This is possible because the lesion may exist and not be found, or because a lesion which was present has disappeared under treatment. On the other hand, a Wassermann reaction may be negative, and yet lesions believed to be syphilitic may be demonstrable.

As a result of his investigations, which included the making of thousands of microscopic sections, with their examination, interpretation and classification, Dr. Turnbull concludes that the Wassermann test performed antemortem, as was done in the 121 cases which he examined, is a diagnostic measure of astonishing precision. No proof of inaccuracy of the Wassermann was found in the whole 121 cases, provided that the test is expected only (1) to give a positive reaction when syphilitic infection is active, and (2) to give a positive reaction either in the serum or in the cerebrospinal fluid when active syphilitic infection is confined

to the central nervous system. The report is detailed, extensive and apparently minutely accurate. It constitutes, therefore, an important document in the study of syphilis.

In the references to literature cited by the author there is no reference to other than British, German and French periodicals. It would interest him, therefore, to refer to a paper on the value of the Wassermann reaction as indicated by postmortem investigation in 331 cases at Bellevue Hospital, as reported by Symmers and others in The Journal. This paper, published in 1918, antedated even the beginning of Turnbull's work. Symmers, too, points out that certain anatomic changes in persons suspected of syphilis are sometimes exceedingly difficult to interpret, not only in the gross organs as they come under orderly examination at necropsy, but also in the subsequent microscopic investigation of individual tissues. He feels, however, that the errors in diagnosis for or against syphilis will balance. As a result of his investigation, he reports that the Wassermann reaction in the living patient gives a negative result in from 31 to 56 per cent. of cases in which the characteristic anatomic signs of syphilis are demonstrable at necropsy, and that it is positive in at least 30 per cent. of cases in which it is not possible to demonstrate at all the anatomic lesions of syphilis at necropsy.

Here, then, is a wide divergence of opinion, based in each instance on an apparently accurate scientific investigation. The subject obviously is susceptible to further study.—Editorial in A. M. A. Journal.

The Nation's Physique.

One of the results of the war is to furnish the only survey of the physical fitness of the male population of military age in this country ever made. It has now been presented to Parliament in an elaborate report by the National Service Medical Boards. The number of medical examinations during the period under review was 2,425,184, but this figure does not represent the number of men examined, as it includes re-examinations. Those examined were classed into four grades: Grade 1. Those who had attained the full normal standard of health and strength and were adjudged capable of enduring physical exertion suitable to their age. They amounted to 36 per cent. of the total. Grade 2. Those capable of only such exertion as does not involve severe strain. They amounted to 22 per cent. Grade 3. Those presenting marked disabilities or such evidence of past disease that they were not considered fit to undergo the physical exertion required for the higher grades. They amounted to 31 per cent. Grade 4. Those totally and permanently unfit for any form of military service. They amounted to 10 per cent. There are no figures to show how far this grading proved correct in the actual conditions of military service. But it can be stated that more recruits were degraded than upgraded. The figures, therefore, err on the side of overrating rather than underrating. An analysis of examinations of

different groups of men between 18 and 25 years of age in one large and important district (Yorkshire) made with a view to revealing the influence of occupation on health gave the following remarkable results:

OCCUPATIONS	Grade 1	Grade 2	Grade 3	Grade 4
Agriculturists	71.9	15.5	8.8	3.8
Miners	68.9	15.1	10.5	5.5
Engineers	60.9	23.9	13.4	1.8
Iron and steel workers	60.2	25.6	11.2	3.0
Lace workers	45.0	26.9	22.7	5.4
Woolen trade	54.6	10.9	24.0	10.5
Tailors	33.9	21.4	33.5	11.2

It will be noticed that the miners and agriculturists show the best results. The general fall in physical fitness shown in the table is a criterion of the effects of the various occupations on the physical welfare of the workers. In the London area it was found that respiratory diseases, particularly pulmonary tuberculosis, showed an enormously high percentage in the densely populated districts of the East End. Some curious figures were given by the occupations. Thus, barbers showed the highest percentage with regard to almost every disease. On the other hand, clerks showed comparatively good results, proving that sedentary work, with due outdoor exercise, is not unhealthful. In the London area 9.9 per cent. of the men were placed in Grades 3 or 4 on account of heart affections, and 3.1 per cent. on account of tuberculosis.

The Needs of the Children of Porto Rico and the Virgin Islands.

In the seventh annual report, the chief of the children's bureau, U. S. Department of Labor, urges that the needs of the children of our island possessions be made a subject for official investigation. In Porto Rico there are "about 10,000 homeless children under twelve years of age, who live by whatever means they are able, many of them begging or stealing, and most of them having no permanent lodging place, sleeping at night in boxes or on doorsteps, or wherever they happen to find a lodging place secure from the rain. These children are, for the most part, deserted and abandoned children of illegitimate parentage, or orphan children whose parents have left no provision for their care and education, and they constitute a fertile soil for the implanting of criminal tendencies and are ready material for older people of criminal habits."

Mothers' Pensions.

According to a bulletin entitled "Laws Relating to Mothers' Pensions," just issued by the Children's Bureau of the U. S. Department of Labor, thirty-nine States, Alaska and Hawaii now have some public provision for mothers left with young children to support, and in at

least five of the remaining States mothers' pension laws have been under consideration. Canada, Denmark and New Zealand also have passed legislation providing aid for mothers. Generally speaking, all mothers' pension laws provide for the payment of a stated weekly or monthly sum for each child under a certain age to mothers who are dependent on their own efforts to support their children, and are morally and physically fit persons to bring up their children. There is considerable variation in the laws in force in the different States. Some States provide pensions only for widowed mothers; others include women who are divorced or who may have been deserted by their husbands, or those whose husbands are in prison, in State asylums, or who are otherwise incapacitated.

Three Bad Bills.

The New York Legislature has now under consideration three bills relating to the medical profession in this State, and three worse bills could hardly be conceived of. One of these is the revived Davenport bill for compulsory health insurance. It is unnecessary to review that, for the profession in this State is now familiar with its chief features and has condemned it with practical unanimity. It legalizes the worst features of the old lodge practice, and all that it insures is, in general, poorer treatment of the sick wage earner than is now at his command with or without fee.

The second of these vicious bills is that known as the Gibbs bill, which purports to provide a greater degree of narcotic drug control than is now afforded by the National and State drug laws. An ordinary man's house is his castle and cannot be broken into without a warrant except in an emergency, to prevent crime or to capture a criminal; but under this bill a doctor's house can be entered at will by the commissioner of narcotic drug control, who may, if he wishes, delegate this task to one of his deputies or inspectors. And when the house has been forcibly entered the inspector may pry into every bureau drawer or private desk on the bare suspicion that a morphine tablet may be lying around somewhere.

The third attempted invasion of the physician's rights is provided for in the Kenyon medical license bill, which calls for annual licensing after examination of the doctor's credentials, filing of his photograph and payment of a $2 fee. Without all this vexatious and humiliating tomfoolery the practitioner of twenty or thirty years' standing will be denied his right to follow his calling and will be put on an equality with the advertising venereal quack, or the unlicensed beauty doctor.

With the physician being forbidden to prescribe a necessary drug until he has done enough paper work to gladden the heart of an army surgeon, and broken the law by revealing professional secrets; being restricted to the dose of an ounce and a half of brandy a day in a case

of prolonged sepsis or pneumonia; being liable to the invasion of his house by a drug commissioner's deputy who may without reason suspect him of hoarding morphine; and being forced to buy each year the privilege earned decades ago of practicing his one-time honorable profession, the doctor's rights to life, liberty and the pursuit of happiness seem to be not altogether inalienable.—Medical Record, March 10, 1920.

A Day in the Life of a Health Insurance Panel Doctor.

The weekly visit to paymaster's window.

The slip showing the amount of "piece work" done.

The 60 per cent. salary dock because of what the medical supervisor considers too many visits.

The shadow of paternalism.

The hurried work.

The snap diagnosis.

The stereotyped therapy.

The failure of preventive medicine.

The very cheap obstetric case.

Bickering with arbitration committees.

The vitiation of the old time relationship between physician and patient.

The decision to strike.

The dismal prospect.

The cursing of those who wished health insurance on the land.

Bonds Not Necessary For Physicians.

Apparently some of the by-products of prohibition are going to be as interesting as the main issue. Without intending to cast any slurs on our great and noble sister profession, it is indeed an ill wind that some lawyer cannot manipulate to his advantage. Judging from the letters received, physicians are being circularized by a member of the legal fraternity who has devised a method of helping them to comply with the prohibition law with the greatest amount of ease and convenience to themselves and with profit to him. The circulars have this interesting legend printed in large red type on the face of the envelope: "What the U. S. Government Allows You to Do. I Know the Law. I Will Do Everything But Sign Your Name." The circular offers to assist physicians in securing government permits to purchase or prescribe liquor. While it does not expressly say so, the impression conveyed to the uninformed physician is that every practicing physician must file a bond in order to purchase or prescribe any amount of liquor. This is not the case. As stated in the abstract of Internal Revenue Regulation No. 60, physicians desiring to purchase and prescribe liquors in their practice

are required to procure a permit to prescribe. This can be obtained by filling out an application on Form 1404 in triplicate and filing it with the federal prohibition director of the State in which the physician is licensed to practice. This permit, when issued, allows him to prescribe liquor for medicinal purposes only, and when such liquor is necessary to afford relief from some known ailment. It also allows him to purchase not more than six quarts of liquor during any calendar year for professional use only. Bonds need not be filed by physicians, dentists or veterinarians, or by hospitals or sanatoriums unless required by the commissioner. It is not necessary for physicians to pay five dollars or any other amount to any lawyer or bonding company. No fee is required for registering and securing a permit under the prohibition law, and the government officers can and will do all that is necessary to assist a physician to procure a permit without any cost to him. The Journal has endeavored to keep its readers informed regarding the provisions of the prohibition law. It will continue to do so in the future. The requirements for registration under the law are not difficult; however, if any of our readers are in doubt as to what to do in order to comply with the law, we shall be glad to advise them.

World-Wide Service for Merchant Marine.

A special service for the boys who man our merchant ships has been inaugurated by the American Red Cross in the new Bureau of Marine Service. This work will be carried on by the seaport chapters of the American Red Cross all over the world.

A reading and writing room to which sailors may repair for rest and recreation and which they may use as their headquarters while in port has been urged on Red Cross chapters as the solution of a long-felt need for American sailors in foreign cities. A chapter member will act as hostess to look after the comfort of the transient guests.

Some cities already have a seamen's home, and in these places the Red Cross will co-operate with this existing agency and supplement its service.

American shipping has increased enormously. More and more seamen are needed to meet the after-war demands of trade expansion. The United States Shipping Board is endeavoring to meet this situation by raising the standard of the seaman's calling, so that a fine type of young American may be persuaded to enlist.

Before the war the welfare of the sailor who roved the seas occupied the attention of a very small circle of people. The war changed all this. College men were found scrubbing decks on Uncle Sam's ships, and young sons of American millionaires donned the wide trousers of the common seaman. It was their call to arms. During the war these men were received by the Red Cross when they came into port and were given the same care and service as was given their fighting brothers in

the army. This is the friendliness that the Red Cross wishes to continue wherever boats dock.

"It will fill a big need in the Orient," said Julian Arnold, a former Red Cross division field representative in China, when told of the new Bureau of Marine Service. "There are no provisions in such ports as Shanghai, Hongkong or Manila for entertainment of a wholesome nature for the American sailor. He is expected to be an outcast and to associate with the dregs of humanity. And how many self-respecting men can be expected, under these conditions, to choose to follow the sea? If America is to build up her merchant marine in a way which will be a permanent asset, careful consideration must be given to its personnel. This means improved conditions for the men that man the ships. Accommodations should be provided at every port which will permit the sailor to have wholesome entertainment under decent auspices. There should be an American reading room where newspapers, writing material, etc., are supplied. There should also be recreational facilities as provided by any club."

This work, Mr. Arnold feels, will be enthusiastically welcomed by American Red Cross members in these seaport cities.

"In Shanghai," he said, "there is an American population of 2,000 who are under the protection and laws of the United States and are not subject to the laws of China. It therefore would be an easy matter to carry on this work under American auspices.

"Since Americans there are enthusiastic over all outdoor sports, football, baseball, rowing, tennis, etc., it would not be difficult to provide facilities by which the American sailors might participate in recreation of this kind."

Recent Observations on the Cerebro-Spinal Fluid.

The cerebrospinal fluid has come to occupy an important place in modern clinical procedure. It is now frequently removed for diagnostic examination or therapeutic purposes; furthermore, the subarachnoid spaces which it occupies are sometimes utilized for the introduction of drugs intended to act on the nervous system. The determination of the mode or origin of the cerebrospinal fluid and its precise functions and physiologic relations to the various contiguous structures is obviously important. Unfortunately, the difficulties of experimentation in connection with this, as with many other parts of the central nervous system, have retarded progress. It need not be surprising, therefore, if some of the current views must be subjected to revision in the light of newer information or a more critical examination of beliefs already adopted.

One of the conclusions reached in recent years by a number of investigators, and already widely quoted, asserts that the cerebrospinal fluid is actively secreted by the choroid plexuses. Some writers believe that it is generated only within the ventricles, particularly the lateral ones, by a truly

secretory process. It is pointed out that when the pathways by which the ventricles communicate with other parts of the brain are obstructed, the fluid collects so as to produce an internal hydrocephalus. Becht, to whom we owe an unusually elaborate investigation of the subject coupled with a trenchant critique of existing views and evidence, has pointed out that the well known facts of internal hydrocephalus do not prove the specific point of formation; for in the region under discussion, increased production of cerebrospinal fluid might result from activity of the choroid plexus, from stimulation of the ependyma cells lining the ventricles, from increased transudation from the capillaries, or from the formation of intracranial lymph. Any one or all of these factors may be involved. Further, the rate of formation may be perfectly normal, the departure from the normal consisting merely in decreased absorption.

Another sort of evidence in support of the specific secretory origin of the cerebrospinal fluid has been sought in the observations that drugs and tissue extracts known to promote the activity of well recognized secretory structures, like the pancreatic glands, seems likewise to facilitate the output of cerebrospinal fluid. Why should not it, too, be placed in the category of the typical secretions: In answer to this, Becht has pointed out the close dependence of the pressure and flow of the fluid on the arterial and venous pressures that exist at any corresponding period in the skull; and, according to him, all the changes in the fluid pressure and fluid outflow that have been offered as proof of the secretory mechanism of formation of the cerebrospinal fluid can be traced to alterations in these circulatory factors. If this is true, then the proof that the fluid is undoubtedly formed by secretion must be abandoned until more cogent evidence is produced for the participation of active cellular processes. While admitting that the choroid plexuses may represent one source of the cerebrospinal fluid, Dercum ventures to believe that it has a further source in the general serous surfaces of its containing cavities.

Another upset of current traditions concerns the possibility of absorption from the subarachnoid spaces. If substances can be rapidly transferred to the nervous system by absorption from the cerebrospinal fluid, the possible importance of intradural injections in medication of the brain and cord is at once suggested. Meltzer has come to the conclusion that such injections do not produce the typical effects of an intravenous injection; and Becht has been unable to demonstrate the absorption of potent drugs from the dural canal when they have been introduced with suitable care to avoid undue pressure or direct traumatic entrance into blood vessels. Coincidently, Dercum has asserted that "attempts at medication of the brain and cord through the subarachnoid space, as in the Swift-Ellis method, are unscientific, as substances introduced into the cerebrospinal fluid rapidly disappear by passing out through the arachnoidal villi and the lymph spaces without in the slightest degree penetrating the nervous parenchyma; the beneficial effects hitherto ascribed to the Swift-Ellis and kindred methods are due entirely to the incidental spinal drainage." He adds that medication of the nervous

parenchyma must be attempted through the alimentary tract, through the skin, through the areolar tissue, or directly through the blood.

If we are to abandon some of the current beliefs regarding the production and escape of the cerebrospinal fluid, what shall be said about its role? Dercum regards it as "pre-eminently a fluid for the hydraulic suspension of the brain and cord; its function is essentially hydrostatic." Having a chemical composition essentially like that of an isotonic saline solution, it has no action on the tissues with which it comes into contact, and, if we may follow Dercum, it has no special function in the nutrition of the brain and cord, which takes place as does that of other tissues.—*Journ. A. M. A.*, April 10, 1920.

Food Drafts for Needy Europeans.

"Food drafts" may now be purchased by persons in this country who wish to succor relatives or friends in eastern and central Europe with food supplies.

Through an arrangement perfected by the American Relief Association, under Herbert Hoover, banks here are prepared to sell orders on Relief Administration warehouses in foreign cities in Europe, and on presentation at a foreign warehouse the recipient may obtain a supply of foodstuffs for personal consumption.

There are three or four million families in the United States with family affiliations in eastern and central Europe. Many of them are endeavoring to assist needy friends in the old country by preparing or purchasing packages of food for overseas shipment. In some cases the packing and extra freight involved adds 100 per cent. to the cost. The buyer of a food draft, on the other hand, pays merely the factory cost of the food plus a reasonable margin to cover cost of transportation and insurance. Profits, if any accrue, will be turned over to the European Children's Fund.

At present the peoples of eastern and central Europe have no food except the government ration, which is insufficient to maintain life properly, and food illicitly circulated and sold at prices prohibitive to the great bulk of the population. The European governments, co-operating in this plan, have agreed that the supplies sent from America through food drafts will be allowed to revolve outside and supplementary to the rationing system.

It is useless to send money abroad, for money becomes worthless paper in countries where there is no food to be had. Shipment of food packages from this country is almost as futile. A letter recently received by the Red Cross Director of Foreign Operations from Relief Administration officials cited the congested condition of the port of Danzig. This city is jammed with shipments destined for Poland, some of which have been lying in the warehouses since last summer, while the intended recipients go hungry. Many boxes arrived almost empty.

Ample stocks of staple foods will be carried in the American warehouses located at Vienna, Prague, Hamburg, Budapest and Warsaw to serve the peoples of Austria, Czecho-Slovakia, Germany, Hungary and Poland respectively. The drafts are issued in denominations of $10 and $50, and the food packets consist of assortments of flour, bacon, beans, corned beef, lard or vegetable oils and condensed or evaporated milk.

The sender of a draft will be notified when the draft has been cashed abroad and in case of nondelivery of the food will be entitled to a refund. The rood can be delivered only at the mai nwarehouses, not beyond. Local deliveries must be arranged by the recipient through local agencies, and the various governments have promised that they will do all possible to expedite such deliveries. Persons who desire to contribute to "general relief" may do so by so specifying on the food draft. Such drafts will be used to supply Red Cross soup kitchens and other authorized relief agencies. Red Cross workers in every community in the United States stand ready to assist foreign Americans by obtaining drafts for them direct from their local banks or by instructing them in the method of obtaining the drafts.

Stunning New Veils Upset Harems.

Women's fashions—the mode and the cost of them—have been responsible for many a little domestic jar, even in the best regulated families, but never did the most extravagant Easter bonnet precipitate the civil war that has broken forth in the Turkish harem over the stunning new veils from Constantinople.

It is altogether the mode—and not the cost—that the Moslem husbands are raising such a hue and cry about. "The Bosnian women from time immemorial have gone heavily veiled in thick opaque coverings," writes an American Red Cross woman worker in the Balkans. But last fall enterprising Turkish merchants in Constantinople shipped into Bosnia the thinnest, prettiest, most transparent face veils these little Mohammedan wives have ever seen. The new mode reveals much of the beauty of feature which formerly was reserved only for the jalous ye of the husband. The women are wild to wear these veils, but their husbands swear they shall never don them. Meanwhile the rebellion goes on in the harem, and the Bosnian men are wondering how American husbands have stood it so long.

The Rockefeller Foundation announced recently that it had conferred four of its fellowships upon physicians from Czechoslovakia who are studying methods of public health administration in American medical schools. Other holders of similar scholarships are: Eight Chinese physicians, eight undergraduate medical students, four Chinese nurses, eleven medical missionaries on furlough, four physicians from Brazil and one from San Salvador. Why not offer some to general practitioners in the United States?

OBITUARIES.

Bartley, R. W., Bennett Medical College, Chicago, 1880. Died at Marion, Ind., January 25; aged 74.

Bean, George W., of Kansas City, Kan., Eclectic Medical University, Kansas City, Mo., 1902. Died at Leavenworth, Kan., February 16; aged 78.

Beebe, LeRoy J., University Medical College of Kansas City, Mo., 1909. Died at Yakima, Wash., December 29; aged 38.

Blank, John T., of Elk City, Kan. Eclectic Medical Institute, Cincinnati, O., 1890. Was killed accidentally by a train at Independence, Kan., March 29; aged 60.

Carey, Henry Leo Keyes, Eclectic Medical College of New York, 1894. Died at his home in New York City, March 6; aged 52.

Crandall, Orson Hyde, Eclectic Medical Institute, Cincinnati, 1867. Died at his home in Quincy, Ill., January 17; aged 93.

Elkins, C. F., Eclectic Medical College, St. Louis, Mo., 1901. Died at his home in Liege, Mo., January 26.

Flack, W. F., Eclectic Medical College, Cincinnati, 1886. Died at his home in Longton, Kan., January 28.

Goldsmith, Julius, Eclectic Medical College of the City of New York, 1905. Died at his home in New York City, March 10; aged 46.

Harcourt, Thomas J., American Eclectic Medical College, Cincinnati 1889. Died at his home in Somerville, O., January 15; aged 82.

Hill, Helen E., Eclectic Medical College of the City of New York, 1881. Died at her home in Brooklyn, N. Y., March 20; aged 80.

Hurlbut, William Henry, Eclectic Medical Institute, Cincinnati, 1868. Died at the home of his daughter in Fond du Lac, Wis., March 23; aged 83.

Jones, Benton K., Eclectic Medical Institute, Cincinnati, 1889. Died at his home in Kenton, O., March 6, 1920; aged 62.

Kirkland, H. Bertram, Eclectic Medical Institute, Cincinnati, 1890. Died at Berea, O., whilst in attendance upon a patient, April 21, 1920; aged 53.

La Rose, Noah J., Eclectic Medical Institute, Cincinnati, 1885. Died at Zion City, Ill., January 18; aged 68.

Leland, Kimball W., of Utica, Ill. Bennett College of Eclectic Medicine and Surgery, Chicago, 1879. Died at La Salle, Ill., March 20; aged 62.

Petsky, E. R., California, 1912. Died at Phoenix, Ariz., February 22.

Renwick, W. Bartley, Bennett Medical College, Chicago, 1880. Died at Marion, Ind., January 25; aged 74.

Rowe, Mark, Eclectic Medical Institute, Cincinnati, 1866. Died at his home in Paris, Ill., February 14; aged 85.

Schulze, John, Bennett Eclectic Medical College, Chicago, 1894. Died at Racine, Wis., January 26; aged 68.

Thompson, George W., Eclectic Medical College of the City of New York, 1885, ex-president of the National Eclectic Medical Association. Died at his home in New York City April 3; aged 65.

THE NATIONAL.

Arrangements for the 1920 meeting in Atlanta, Ga., are rapidly approaching completion. There will be plenty of entertainment, and a good time as well as a profitable meeting is anticipated. Complete your arrangements and meet us in Atlanta. Aside from the educational standpoint, the social feature has a strong hold upon one. We like to meet our old acquaintances and renew associations made in past years. We hope to see a large delegation from the South. If there was ever a time organization upon the part of the medical profession was necessary it is now. Legislation of a most inimical character to the profession is being constantly enacted, and unless intelligent concerted action is taken, the profession will find itself overwhelmed. Forget yourself and give your allegiance and support to the cause. Exhibit some loyalty and patriotism.

Headquarters are at the Kimball Hotel, whose rates are from $1.50 and up. Write Dr. Samuel Green at once and reserve your rooms. The committee of arrangements has arranged for a Georgia barbecue at the country club, and those who partook of the southern barbecue at Nashville will have a vivid recollection of what that means.

There will also be an automobile trip to Stone Mountain and surrounding country.

Prof. Thomas Lloyd of Cincinnati, a son of John Uri Lloyd, will give an illustrated lecture Wednesday describing his experiences in South America, and Dr. N. A. Graves, of Chicago, will hold a clinic on tuberculosis.

National Officers.

President—O. S. Coffin, M.D., Indianapolis, Ind.
First Vice-President—Frank B. Crowell, M.D., Lawrence, Mich.
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Treasurer—H. A. Shafor, M.D., Detroit, Mich.

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Council of Medical Education—R. J. Lambert, M.D., St. Charles, Ill.; G. A. Munch, M.D., Tampa, Fla.; E. G. Sharp, M.D.; Guthrie, Okla.

Committee on Arrangements—Samuel Green, M.D., Atlanta, Ga.; Dan Griffith, M.D., Atlanta, Ga.; D. D. Moncrief, M.D., Atlanta, Ga.; J. W. H. Powell, M.D., Atlanta, Ga.; J. Q. Brantley, M.D., Atlanta, Ga.; J. R. Duvall, M.D., Atlanta, Ga.

SECTION ON PRACTICE.

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Vice-Chairman.....H. T. Webster, M.D., Oakland, Calif.
Secretary.....C. H. Murphy, M.D., Lansing, Mich.

1. Treatment of Influenza.....R. L. Thomas, M.D., Cincinnati, O.
2. A Few Remedies I Have Learned to Rely upon During My Twenty-seven Years of Practice. O. B. Walker, M.D., Bowman, Ga.
3. Pleurisy—Symptoms, Diagnosis and Treatment. N. A. Graves, M.D., Chicago, Ill.
4. Hay Fever.....C. H. Murphy, M.D., Lansing, Mich.
5. Gonorrhea in the Female.....H. A. Shafor, M.D., Detroit, Mich.
6. The Modern Trend of Medical Practice. E. G. Sharp, M.D., Guthrie, Okla.
7. Tonsillitis—Sequelae and Treatment J. P. Harvill, M.D., Nashville, Tenn.
8. Intravenous Treatment of Disease.....L. S. Downs, Waco, Tex.
9. La Grippe.....R. B. Crawford, M.D., Sioux City, Iowa
10. Proteogens—My Experience the Past Year. T. D. Hollingsworth, M.D., Akron, O.
11. Removal of Adenoids and Diseased Tonsils. C. J. Hemminger, M.D., Rockwood, Pa.
12. Treatment of Influenza.....Florence Stir Smith, Newark, O.
13. The Ego in Practice.....B. E. Dawson, M.D., Kansas City, Mo.
14. Smallpox.....John B. Matthews, M.D., Blue Mound, Ill.
15. Cerebrospinal Meningitis—Diagnosis and Treatment. H. F. White, M.D., Flovilla, Ga.
16. Eclectic Medicine.....W. N. Holmes ,M.D., Nashville, Tenn.

SURGERY.

Chairman.....E. B. Shewman, M.D., Cincinnati, O.
Vice-Chairman.....F. L. Wilmeth, M.D., Lincoln, Neb.
Secretary.....J. S. Hull, M.D., Hicksville, O.

1. Burns.....S. W. Moreland, M.D., Jonesboro, Ark.
2. The Treatment of Pus Appendix and Other Infected Wounds with Dichloramine-T in Chlorocosane Oil. J. Earl Holman, M.D., Indianapolis, Ind.
3. Appendix.....E. T. Akin, M.D., Jenkinsburg, Ga.
4. Pre-Operative Care.....Byron Nellans, M.D., Cincinnati, O.
5. End Results.....T. D. Hollingsworth, M.D., Akron, O.
6. Local Anesthetics in Hernias. A. C. Prichard, M.D., Hot Springs, Ark.
7. Gunshot Wounds Complicated with Fractures. Fred Hosman, M.D., Indianapolis, Ind.

8. Some Odd Cases Among the Negroes.
D. E. Saxton, M.D., Tampa, Fla.
9. Some Fracture Mistakes...Chas. Wm. Larrabee, M.D., Gainesville, Ga.
10. The County Doctor a Surgeon.....J. S. Hull, M.D., Hicksville, O.
11. Unannounced.....J. J. Sutter, M.D., Bluffton, O.
12. Surgery of the Gall-Bladder.....J. S. Hagen, M.D., Cincinnati, O.
13. Surgery of the Thyroid.....E. B. Shewman, M.D., Cincinnati, O.
14. Bone Surgery.....C. W. Russell, M.D., Springfield, O.
15. Minor Surgery and General Practice.
Ralph Barrett, M.D., Mansfield, O.
16. Thyroidectomy.....F. L. Wilmeth, M.D., Lincoln, Neb.
17. Prostatectomy.....Cressman, M.D., Hastings, Neb.
18. Umbilical Hernia.....H. H. Helbing, M.D., St. Louis, Mo.
19. Gall Stones.....M. M. Hamlin, M.D., St. Louis, Mo.
20. Prolapsus Recti.....B. E. Dawson, M. D., Kansas City, Mo.
21. Myofibroma.....J. F. Cave, M.D., Kansas City, Mo.
22. Surgery in Action.....J. F. Spealman, M.D., Lincoln, Neb.
23. After-dressings.....H. W. Wilmeth, M.D., Lincoln, Neb.
24. Unannounced.....F. M. Andrus, M.D., Lincoln, Neb.
25. Perineorrhaphy.....C. A. Lutgen, M.D., Auburn, Neb
26. Thyroidectomy.....O. M. Moore, M.D., York, Neb.
27. Gastro-Enterostomy.....E. G. Sharp, M.D., Guthrie, Okla.

Mental and Nervous Diseases.

Chairman.....W. E. Postle, M.D., Columbus, O.
Vice-Chairman.....F. S. Peck, M.D., Oklahoma City, Okla.
Secretary.....T. D. Adlerman, M.D., Brooklyn, N. Y.

1. The Care of the Insane.....W. E. Postle, M.D., Columbus, O.
2. Neurasthenic Psychoses.....T. D. Adlerman, M.D., Brooklyn, N. Y.
3. Neuralgia.....W. N. Mundy, M.D., Forest, O.
4. Drugs in the Treatment of Headaches.
T. D. Adlerman, M.D., Brooklyn, N. Y.
5. First Signs of Insanity.....F. S. Peck, M.D., Oklahoma, City, Okla.
6. Unannounced.....W. P. Best, M. D., Indianapolis, Ind.
7. Myxedema.....T. D. Adlerman, Brooklyn, N. Y.

Diseases of Women and Children.

Chairman.....Q. Robert Hauss, M.D., Sellersburg, Ind.
Vice-Chairman.....Ethel Richardson, M.D., Quincy, Ill.
Secretary.....J. E. Holman, M.D., Indianapolis, Ind.

1. Normal Menstruation.....Fred L. Hosman, M.D., Indianapolis, Ind.
2. Puerperal Infection.....C. A. Tindall, M.D., Shelbyville, Ind.
3. Dysmenorrhea.....J. E. Holman, M.D., Indianapolis, Ind.

4. Injuries and Ailments Following Labor.
M. S. Canfield, M.D., Frankfort, Ind.
5. Gonorrheal Infection.....McGuire Porter, M.D., Elnora, Ind.
6. Toxemias of Pregnancy.....H. E. Vitou, M.D., South Bend, Ind.
7. Carcinoma of the Cervix.....Wm. P. Best, M.D., Indianapolis, Ind.
8. Gynecological Examinations.....J. H. Hauck, M.D., Terre Haute, Ind.
9. Extra Uterine Pregnancy.....Q. R. Hauss, M.D., Sellersburg, Ind.

PHARMACOLOGY, MATERIA MEDICA AND THERAPEUTICS.

Chairman.....R. J. Lambert, M.D., St. Charles, Ill.
Vice-Chairman.....H. W. Felter, M.D., Cincinnati, O.
Secretary.....M. M. Harvill, M.D., Nashville, Tenn.

1. Unannounced.....J. P. Harvill, M.D., Nashville, Tenn.
2. Bryonia.....J. O. Cummins, M.D., Nashville, Tenn.
3. Nux and Belladonna.....Geo. M. Hite, M.D., Nashville, Tenn.
4. Gelsemium.....W. N. Holmes, M.D., Nashville, Tenn.
5. Unannounced.....B. L. Simmons, M.D., Nashville, Tenn.
6. The Big Three.....J. Harville Hite, M.D., Nashville, Tenn.
7. Eupatorium.....F. P. McKeel, M.D., Nashville, Tenn.
8. Motherwort.....M. M. Harvill, M.D., Nashville, Tenn.
9. Antiperiodics.....R. O. Williams, M.D., Humboldt, Tenn.
10. The Medicinal Plants of the South..H. W. Felter, M.D., Cincinnati, O.

SECTION ON DISEASES OF CHILDREN.

Chairman.....C. A. Tindall, Shelbyville, Ind.
Vice-Chairman.....Nannie M. Glenn, State College, Pa.
Secretary.....Frank P. Davis, M.D., Enid, Oklahoma

1. Relation of Teeth to Facial and Maxillary Development.
Donald Morrison, D.D.S., Atlanta, Ga.
Discussion by Dan H. Griffith, M.D., Atlanta, Ga., and E. B. Shewman, M.D., Cincinnati, Ohio.
2. Scarlet Fever.....Florence Stir-Smith, M.D., Newark, O.
Discussion by Ivadel Rogers, M.D., Pryor, Okla., and J. F. Kittredge, M.D., St. Louis, Mo.
3. Treatment of Pneumonia in Infants and Children.
Albert Schwartz, M.D., Cincinnati, O.
Discussion by R. L. Thomas, M.D., Cincinnati, O., and O. C. Baird, M.D., Chanute, Kan.
4. Scarlet Rash of Influenza in Children—Frequent Occurrence and Treatment.....Jerome E. Holman, M.D., Indianapolis, Ind.
Discussion by Nannie M. Glenn, M.D., State College, Pa., and J. W. Pruett, M.D., St. Louis, Mo.

5. Infantile Enteritis.....Ivadell Rogers, M.D., Pryor, Okla.
   Discussion by H. V. Brown, M.D., Los Angeles, Calif.,
   and T. A. E. Evans, M.D., Farmers, Ky.
6. Eclampsia Infantum.....C. W. Beaman, M.D., Cincinnati, O.
   Discussion by A. F. White, M.D., Flovilla, Ga., and
   D. E. Saxton, M.D., Tampa, Fla.
7. Rheumatic Fever.....E. M. Wright, M.D., Coshocton, O.
   Discussion by J. W. Goss, M.D., Delaper, Ga., and
   J. Paul Harvill, M.D., Nashville, Tenn.
8. Malnutrition in Children.....R. E. Holmes, M.D., Harrisburg, Pa.
   Discussion by R. J. Lambert, M.D., Chicago, Ill., and
   Jay Baird, M.D., Coffeyville, Kan.
9. Tubercular Meningitis.....W. N. Mundy, M.D., Forest, O.
   Discussion by Charles W. Beaman, M.D., Cincinnati, O.,
   and Mary A. Willetts, M.D., Jersey City, N. J.
10. Ophthalmia Neonatorum.....W. W. Tindall, M.D., Shelbyville, Ind.
    Discussion by J. D. McCann, M.D., Monticello, Ind.,
    and W. P. Best, M.D., Indianapolis, Ind.

The Kimball Hotel.

Dear Doctor:

The success or the failure of the next meeting of the National Eclectic Medical Association will depend mainly upon the members of your state society. It will depend upon your attendance and the attendance of your friends and we therefore appeal to you to make all possible efforts to come to Atlanta, June 15 next, and help us with your presence and with your advice in matters which concern your welfare as well as mine.

Doctor, if you have not as yet paid your State and National dues do so at once. Send your check to your state secretary, or you can mail same to me and I will see to it that you get your receipt.

Do not put this letter away and forget all about it; place it on your desk and remember the dates of the National meeting—June 15 to 18, 1920. We want you there.

Fraternally,

T. D. ADLERMAN, M.D.

For the National Committee on National Propaganda.

NEW APPLICATIONS FOR MEMBERSHIP.

March 31 to May 20, 1920.

Florida—Goodson, Wm. M., Gonzales; Hammond, Mart, Boca Grande; Hetherington, J. P., Miami; Lisk, Percy F., Fort McCoy; McClelland, P. T., Welbourne; Page, C. W., Palatka; Preston, H. P., Melrose; Reynolds, Claude, Zolfe; Speers, B. D., Zolfe Springs; Weintraub, Maurice, Jacksonville; Roach, E. J., Haines City.

New York—Atchley, Roger Q., Brooklyn; Coleman, Joseph, New York; Coleman, Marian, New York; Kitsmiller, Oleen K., Brooklyn; Phelan, Joseph M., Brooklyn.

Oklahoma—Williams, R. A., Fairland.

Tennessee—Voss, Joseph E., Jackson.

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Listerine is a non-poisonous, non-irritating, antiseptic solution, of which the base is boric acid. As a base for many prescriptions it is absolutely unequaled, giving to a prescription its own qualities and rendering the prescription grateful to the patient.

Listerine in its long use by physicians has never once been criticized for any untoward action upon the mucous membrane, and this is a remarkable history for a product that has been a favorite with two generations.—The Journal-Lancet, Feb. 15, 1920.

Enfeebled Digestion.—There are many persons whose digestion is enfeebled, and undoubtedly the conditions caused by the war have had th eresult of making this number much more numerous. Seng is particularly valuable in these cases, as it will promptly stimulate the glands of the stomach, and in combination with a judicious regulation of the diet may be depended on to soon bring about an increase of digestive activity.

"I have used Tongaline constantly since I began to practice medicine and it has proved one of the most reliable remedies with which I have had any experience. At this place, where thousands of syphilitics and rheumatics come each year, prescribe Tongaline every day, because it combines so perfectly with most any drug, and it is especially useful as a vehicle for potassium iodide, rendering the stomach more tolerant and furnishing a valuable adjuvant to the effects of the iodide."

Think of sanmetto and cannabis indica in chronic cystitis, chronic irritation of the genito-urinary tract, burning micturition and strangury. Note briefly the specific indications: marked nervous depression; irritation of the genito-urinary tract; burning frequent micturition; painful micturition, with tenesmus, and scalding urine. The dose of cannabis indica is ¼ to 1 grain according to the susceptibility of the patient, sanmetto one to two teaspoonfuls.

LEND A HAND

The National Eclectic Medical Association is not accomplishing its maximum of good without a full and complete membership which includes every eligible Eclectic physician in the United States. It is impossible for your Propaganda Committee to approach every man who should be a member. If you have as your neighbor a non-member qualified for membership, it is your duty to interest him in your society and its meetings. Tell him about your State Association, your National, and the "National Quarterly"—show him what he is missing. Then ask him to fill out this application and submit it to H. H. Helbing, M.D., Natl. Secy., 4963 Fountain Avenue, St. Louis, Mo.

Application for Membership

To the Officers and Members of the

----------**Eclectic Medical Society.**

I hereby make application for membership in the State and National Societies. I am inclosing check for $4.50 to meet my dues for 1920, including membership in the State Eclectic Medical Association and the National Eclectic Medical Association. It is understood that same is to cover, in addition to the dues, a year's subscription to the "National Quarterly" and the other association benefits.

(Signed)

(Full Name)----------

City ----------

Street or P. O. Box----------

Licensed to Practice

in ----------

Have Practiced in

This Location since----------

SEPTEMBER, 1919. VOL. 11, No. 1.

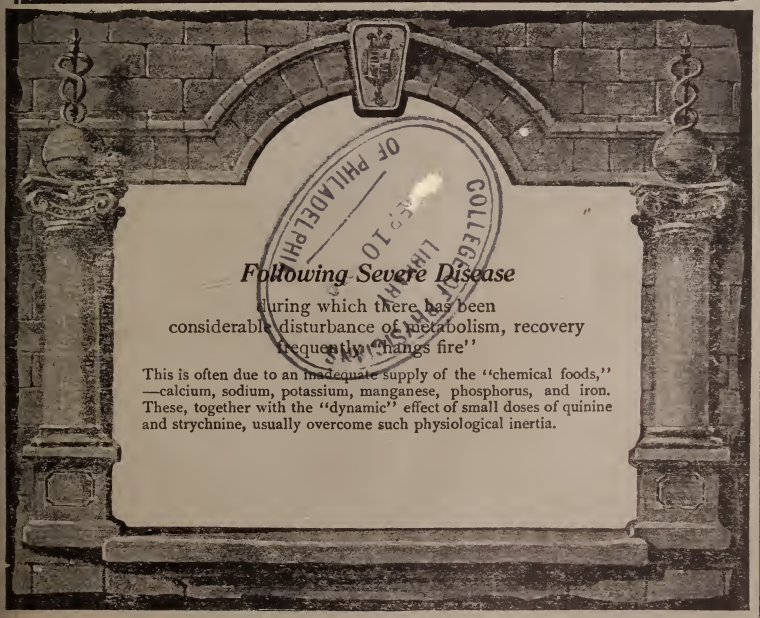
THE NATIONAL ECLECTIC MEDICAL ASSOCIATION QUARTERLY

Edited by WILLIAM NELSON MUNDY, M.D.,

Forest, Hardin County, Ohio

A journal of Eclectic medicine and surgery, comprising the proceedings, papers and discussions of the Association and published in the interest of the Eclectic system of medicine. Published by the Association, 640 West Sixth Street, Cincinnati, Ohio.

TABLE OF CONTENTS ON PAGE 1.


Following Severe Disease
during which there has been
considerable disturbance of metabolism, recovery
frequently "hangs fire"
This is often due to an inadequate supply of the "chemical foods,"
—calcium, sodium, potassium, manganese, phosphorus, and iron.
These, together with the "dynamic" effect of small doses of quinine
and strychnine, usually overcome such physiological inertia.

Entered as second-class matter, December 13, 1909, at the Post Office at Cincinnati, Ohio, under Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized on July 18, 1918.

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THE usefulness of ipecac has been shown in pyorrhea, amebic dysentery, amebic infection of the tonsils, typhoid fever, and in various intestinal disorders such as flatulence, diarrhea and constipation. The difficulty of giving it in sufficiently large doses to secure full therapeutic effects is overcome by administering

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Indianapolis, U. S. A.

DECEMBER, 1919. VOL. 11, No. 2.

THE NATIONAL ECLECTIC MEDICAL ASSOCIATION QUARTERLY

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Fellows' Syrup of the Hypophosphites

supplies the indispensable mineral salts required by the system together with the two potent dynamic agents, strychnine and quinine. It accelerates convalescence and restores strength and vigor

The Standard Tonic for Over Half a Century"

SAMPLES AND LITERATURE UPON REQUEST

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MARCH, 1920. VOL. 11, No. 3.

THE NATIONAL ECLECTIC MEDICAL ASSOCIATION QUARTERLY

Edited by WILLIAM NELSON MUNDY, M.D.,
Forest, Hardin County, Ohio

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RHEUMALGINE—A compound of strontium salicylate, hexamethylenamine and colchicine. Has proved very effective in acute articular and chronic rheumatism, muscular pains, lumbago, sciatica, migraine of the rheumatic, gout, etc. Rheumalgine can be prescribed in both liquid and tablet form, the former in twelve-ounce bottles and the latter in bottles of 100 tablets.

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ELI LILLY & COMPANY

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JUNE, 1920. VOL. 11, No. 4.

THE NATIONAL ECLECTIC MEDICAL ASSOCIATION QUARTERLY

Edited by WILLIAM NELSON MUNDY, M.D.,

Forest, Hardin County, Ohio

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A concentrated mineral pabulum, possessing unrivalled therapeutic properties in all Wasting Diseases, which have been termed "Demineralizations" by modern clinicians.

Supplies the organism with those indispensable mineral elements:
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together with the dynamic action of quinine and strychnine.

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Samples and Literature upon request.

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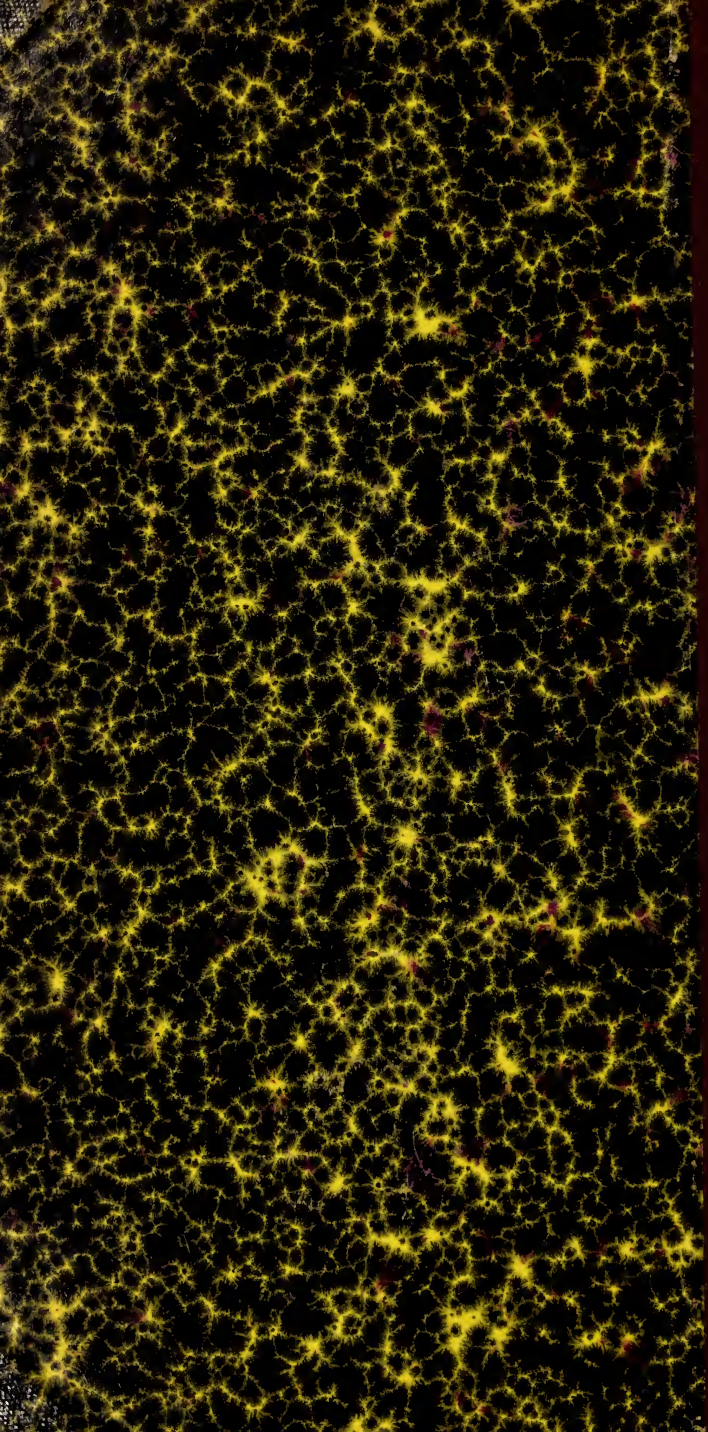
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